

W. 3002
No. 14968

United States
Court of Appeals
for the Ninth Circuit

HARRY X. BERGMAN, PERMA-LOX ALUMI-
NUM SHINGLE CORPORATION and VIC-
TOR H. LANGVILLE, doing business under
the assumed name of Langville Manufacturing
Company, Appellants,
vs.

ALUMINUM LOCK SHINGLE CORPORA-
TION OF AMERICA, Appellee.

Transcript of Record

In Two Volumes

VOLUME I.

(Pages 1 to 307, inclusive)

Appeal from the United States District Court for the
District of Oregon

FILED

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PAUL P. O'BRIEN, CLERK

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[Clerk's Note: When deemed likely to be of an important nature, errors or doubtful matters appearing in the original certified record are printed literally in italic; and, likewise, cancelled matter appearing in the original certified record is printed and cancelled herein accordingly. When possible, an omission from the text is indicated by printing in italic the two words between which the omission seems to occur.]

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In the United States District Court
District of Oregon

Civil Action No. 7084

ALUMINUM LOCK SHINGLE CORPORATION OF AMERICA, Plaintiff,

vs.

HARRY X. BERGMAN, PERMA-LOX ALUMINUM SHINGLE CORPORATION and VICTOR H. LANGVILLE doing business under the assumed name of LANGVILLE MANUFACTURING COMPANY, Defendants.

COMPLAINT

For Infringement of Letters Patent No. 2,631,552,
L. J. Korter, March 17, 1953

The plaintiff complains of the defendants individually and severally and alleges:

1. Plaintiff.

The plaintiff, Aluminum Lock Shingle Corporation of America, is a corporation duly organized and existing under the laws of the State of Oregon, having a regular and established place of business at 725 S.E. Powell Blvd., Portland 2, Oregon.

2. Defendants.

That the plaintiff is advised and believes as follows:

(a) The defendant, Harry X. Bergman, has a business address at 427 S.W. 13th Avenue, Port-

land, Oregon, and is a resident within the jurisdiction of this Court.

(b) The defendant, Perma - Lox Aluminum Shingle Corporation is a corporation duly organized and existing under the laws of the State of Oregon, having a regular and established place of business at 427 S.W. 13th Avenue, Portland, Oregon. This corporation is the manufacturing agent of defendant, Harry X. Bergman.

(c) The defendant, Victor H. Langville is an individual doing business in the State of Oregon under the assumed name of Langville Manufacturing Company, having a regular and established place of business at 2036 S.E. Grand Avenue, Portland, Oregon, and is a manufacturer of the infringing shingles for defendants set forth in paragraphs 2(a) and 2(b).

Each of these defendants have, in Portland, Oregon, and elsewhere in the United States, committed and are committing acts of infringement herein complained of, and are threatening to continue to do so.

3. Jurisdiction.

That the jurisdiction of this Court is based upon the patent laws of the United States of America.

4. Title to Patent.

That on March 17, 1953, Letters Patent of the United States, No. 2,631,552, for Aluminum Shingle, were duly and legally issued to Louis J. Korter on an application filed January 9, 1950, Serial No. 137,566, and that the entire right, title and interest in and to said Letters Patent have been assigned to

the plaintiff, Aluminum Lock Shingle Corporation of America.

5. Infringement.

That the defendants have, within the last six years, and prior to the filing of this Complaint and subsequent to the date of said Letters Patent No. 2,631,552, infringed said Letters Patent, are now infringing the same, and threaten to continue to infringe, by making, causing to be made, selling or causing to be sold, and/or using or causing to be used, shingles, within this district and elsewhere in the United States and within the jurisdiction of this Court, embodying the invention disclosed and claimed in said Letters Patent owned by the plaintiff, Aluminum Lock Shingle Corporation of America, the same having been done and is being done wilfully and without the consent of the plaintiff, and the defendants will continue to do so unless enjoined by this Court.

6. Unfair Competition.

Defendant Harry X. Bergman, purchased the patented shingles from plaintiff to roof his house and the said Bergman, having gained knowledge of the product from this and other installations, then entered into the business of manufacturing and selling plaintiff's patented shingle under the name of Perma-Lox Aluminum Shingle Corporation, but without plaintiff's consent, and within six years prior to the filing of this Bill of Complaint.

Defendant Bergman and his salesmen have told the trade in general, and in particular customers interested in purchasing aluminum shingles, that

Aluminum Lock Shingle Corporation of America, is a subsidiary of Bergman's manufacturing company, Perma-Lox Aluminum Shingle Corporation, and, therefore, one and the same company, in an attempt to trade on the reputation and good will of plaintiff's company to the financial detriment of plaintiff.

Defendant Bergman has also unfairly competed with plaintiff by using plaintiff's photographs showing the patented shingle in an attempt to palm off his shingles for those of plaintiff.

Defendant Bergman has also competed unfairly with plaintiff in the matter of advertising by his imitation of plaintiff's advertising.

Defendant Bergman has caused to be printed and distributed an advertisement which states "Do not confuse Perma Lox Aluminum Shingles with imitations or other aluminum products of similar name. Only Perma Lox has all these features," full well knowing that the plaintiff's shingle, which Bergman has purloined to his own use, contained the four features mentioned specifically in the advertisement, notwithstanding Bergman's allegation that "only Perma Lox has all these features."

Plaintiff further avers on information and belief that defendant Bergman has, by his actions and words, advised competitors to infringe plaintiff's patent on the ground that he considers the patent invalid in view of previous patents, and that these competitors have nothing to fear from the continuous manufacture of the patented shingle, notwithstanding advice to the contrary by plaintiff. De-

defendant Bergman has defiantly ignored plaintiff's demands that he shall cease infringement and has represented to the trade and to his customers that he will continue to make a duplicate of plaintiff's shingle, notwithstanding plaintiff's rights in the patent which were acquired through considerable expense and development cost to plaintiff, thus allowing defendant Bergman and his company to manufacture and sell shingles according to the patent at a reduced price because he had no such expense.

7. Notice.

That public notice pursuant to Statute has been given by the plaintiff by stamping on each shingle notice of the ownership of said patent by the plaintiff setting forth the number 2,631,552 of said patent in suit, all as required by law. In addition, plaintiff has notified the trade through advertisement that the improved shingle has been patented.

Defendants have been individually notified shortly after the issuance of the patent that plaintiff's shingle which they were duplicating was covered by the said patent, and defendants, each of them, have deliberately refused to heed this notification.

8. Public Acquiescence.

Plaintiff's shingle, manufactured prior to and since the issuance of patent No. 2,631,552, has had no infringers or imitators until the defendants herein have separately infringed and together have conspired to infringe and have encouraged others to infringe. The trade has accepted plaintiff's improved shingle, except for defendants' conspiracy to discredit plaintiff's improvement and the patent

based thereon. Defendant Bergman has openly avowed that he will break the patent and will continue to make and use the features of plaintiff's shingle, showing the deliberate intent to infringe by said Bergman.

9. Damages.

That the defendants have derived unlawful gains and profits from such infringement by the manufacture, use and/or sale of the infringing shingles which the plaintiff would otherwise have received, but for such infringement by the defendants, and such infringement by the defendants has caused plaintiff irreparable damage and injury by loss of good will, prestige, customers and customer relationships as well as loss of the profits from the shingles it would otherwise have sold if the defendants had not sold them, and will continue so to do unless enjoined by this Court. This damage is aggravated by the fact that the defendants, Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation and their distributors and agents, have represented themselves to many of plaintiff's customers to be the sales agent of the plaintiff; wherefore, this plaintiff prays that this wilful damage of irreparable character and the destruction of these customer relationships by the defendants has multiplied the general damage suffered by the plaintiff to not less than three-fold said general damage.

10. Prayer.

The plaintiff, therefore, prays:

(a) For a preliminary and a permanent injunction restraining the defendants, and each of them,

their officers, agents, servants and employees, from directly or indirectly making or causing to be made, selling or causing to be sold, and/or using or causing to be used the shingles covered by said Letters Patent No. 2,631,552 and from infringing upon and violating the same, in any manner whatsoever, and from committing the acts herein complained of.

(b) For a decree of the Honorable Court enjoining defendants, separately and collectively, from competing unfairly with plaintiff in the sale of metal shingles in the manner of sale, the representations made to prospective customers and in advertising, particularly in making false statements, and other violations of fair trade practices.

(c) For recovery of its general damage and for recovery of its special damage and the trebling thereof for the wilful nature of said infringement and for recovery of costs and attorney fees in view of the flagrant character of the unfair competition and wilful infringement of the defendants as set forth herein.

(d) For such other and further relief as the Court may deem meet, just and proper.

/s/ S. J. BISCHOFF,
Attorneys for Plaintiff

/s/ H. A. TOULMIN, JR.
Of Counsel

[Endorsed]: Filed July 27, 1953.

[Title of District Court and Cause.]

ANSWER AND COUNTERCLAIMS

Comes now Defendants, Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation, and answer the complaint as follows:

1. Defendants admit the allegations contained in paragraph 1 of the complaint.

2. Defendants admit the allegations contained in paragraphs 2(a) and 2(b) of the complaint, except that Perma-Lox Aluminum Shingle Corporation is not a manufacturing agent of Defendant Harry X. Bergman, but a sales organization for selling aluminum shingles. Defendants deny that they have committed or are committing acts of infringement complained of.

3. Defendants admit the allegations contained in paragraph 3 of the complaint.

4. Defendants deny the allegations contained in paragraph 4 of the complaint, except that United States Letters Patent No. 2,631,552 issued to Louis J. Korter and that said patent was assigned to Plaintiff.

5. Defendants deny the allegations contained in paragraph 5 of the complaint.

6. Defendants deny each and every allegation of paragraph 6 of the complaint, except that Defendant, Harry X. Bergman, (hereinafter sometimes referred to as Bergman), did have a roof applied to his house which was sold to him by Plaintiff, that he does sell under the name of Perma-Lox Alumi-

num Shingle Corporation (hereinafter sometimes referred to as Perma-Lox), aluminum shingles for the roofing of houses, that he did cause to have printed and distributed an advertisement which stated, "Do not confuse Perma-Lox Aluminum shingles with imitations or other aluminum products of similar name. Only Perma-Lox has all these features," and that he has stated and believes that Plaintiff's patent No. 2,631,552 is invalid.

7. Defendants are without information or knowledge sufficient to form a belief as to the truth of the allegations of paragraph 7 of the complaint, except that Defendants Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation have never been notified by Plaintiff that they were infringing its patent.

8. Defendants deny each and every allegation of paragraph 8 of the complaint, except that Defendant, Bergman, has openly stated that Plaintiff's patent No. 2,631,552 is invalid.

9. Defendants deny each and every allegation of paragraph 9 of the complaint.

10. For a further and separate defense, Defendants allege that United States Letters Patent No. 2,631,552, issued to L. J. Korter, is invalid, void, and of no effect in law for the following reasons among others:

A. Because, by reason of the state of the prior art existing at the time of the alleged invention by L. J. Korter of the thing alleged to be described and patented in said patent, said thing was not an invention and did not require the use of any exercise of

any inventive faculty for its production, was obvious to and involved only the mechanical or ordinary skill of those versed in the art to which said things pertained, and was not patentable.

B. Because L. J. Korter was not the original, or first, or sole, or any inventor or discoverer of any alleged invention alleged to be patented in and by said Letters Patent.

C. Long prior to the alleged invention thereof by L. J. Korter, and more than one year prior to the filing of the application for said Letters Patent, the alleged invention and every material and substantial part thereof had been shown, described and patented in and by each of the following Letters Patents of the United States and foreign countries and had been invented, known publicly, used, on sale and sold by each of the patentees at the places respectively named in said Letters Patents, and each of the said patentees was the first and original inventor thereof and at all times were using reasonable diligence in adapting and perfecting the same, and the respective places and residences of the patentees are specifically set forth in said Letters Patents, to-wit:

Number	Name	Date
124,963	Lewando	March 26, 1872
140,928	Lewando	July 15, 1873
220,181	Slaughter	Sept. 30, 1879
262,475	Repp	Aug. 8, 1882
303,921	Cusack	Aug. 19, 1884
553,514	Crawford	Jan. 28, 1896
1,026,202	Clawson	May 14, 1912

1,406,757	Pruden	Feb. 14, 1922
1,763,870	Talmage	June 17, 1930
1,971,517	Belding	Aug. 28, 1934
2,173,774	Birch et al.	Sept. 19, 1939
2,213,519	Faber	Sept. 3, 1940
2,243,256	Miller	May 27, 1941

Foreign Patents

No. 399 Great Britain Dated 1869

And other Letters Patents of the United States and foreign countries and publications, the exact numbers and dates and the names of the patentees of which are at present unknown to the Defendants, but which numbers and dates and names Defendants pray leave to insert in this answer by amendment thereto when ascertained.

D. Because more than one year prior to the filing of the application for said Letters Patent, and prior to the alleged invention by L. J. Korter of the alleged invention claimed in said Letters Patent, said alleged invention had been in public use and on sale and had been known by various persons, firms and corporations in various and sundry places in the United States of America, the exact names and locations of which Defendants pray leave to insert in this answer by amendment thereto when ascertained.

E. Because of the proceedings had or taken in the Patent Office during the prosecution of the application for said Letters Patent or because its claim was by amendment limited in scope in order to se-

cure its allowance, Plaintiff is estopped to assert an interpretation which would enable such claim to include the accused article.

11. For a further and separate defense, Defendants allege that the complaint should be dismissed because Plaintiff has unclean hands and is not entitled to any relief in a court of equity for the following reasons:

A. Plaintiff has wilfully and deliberately misled and deceived the public by:

1. Altering and defacing a document of the United States government, the original of United States Letters Patent No. 2,631,552, and prominently advertising, publishing and otherwise displaying said defaced document to make it appear that Plaintiff, Aluminum Lock Shingle Corporation of America, was the patentee of said invention, when, in truth and in fact, Plaintiff was not and could not have been the patentee of the invention, but merely the assignee.

2. Prominently displaying in its advertisements a photograph or design of a portion of the overlapped interlocking edges of a shingle along with reference to said patent to make it appear that the patent had been granted on said interlocking feature, when, in truth and in fact, and to Plaintiff's own knowledge, the patent could not have been granted on said feature because interlocking shingle edges were known long prior to the alleged date of invention of said patent.

3. Making it appear from its advertising and displays that Plaintiff, Aluminum Lock Shingle

Corporation of America, and the Aluminum Company of America (Alcoa) are either one and the same or connected in some way, when, in truth and in fact, there is no corporate connection between the two.

4. Advertising its shingles as being sold "across the United States," when in fact they are not; that it is "World's Largest Manufacturer," when in fact Plaintiff is not a manufacturer, but a sales organization; that its shingles have certain features which no other shingles have, when in fact other shingles have all these features and more.

B. Plaintiff, during the periods that the Office of Price Stabilization was in force, violated price ceilings on the patented shingles, and an action for said violations is pending in this Court—United States vs. Aluminum Lock Shingle Corp., Civ. 6531.

C. Plaintiff sells the patented shingles in packages labeled "one square" which means that the package is supposed to contain 100 square feet. In fact, said packages usually contain only about 93 square feet, and the public is thereby being misled and defrauded.

D. Plaintiff has been guilty of unfair competitive practices and violations of the antitrust laws, hereinafter set forth in counterclaims two and three, which allegations are here incorporated, referred to and made a part hereof.

Defendants' First Counterclaim

For a further and separate defense by way of a counterclaim against Plaintiff and praying for af-

firmative relief and for cause of action, Defendants, Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation, allege:

I.

In addition to the grounds for jurisdiction referred to in paragraph 3 of Plaintiff's complaint filed herein, the grounds upon which this Court's jurisdiction depends in this counterclaim is that it is a counterclaim for declaratory judgment under Title 28, United States Code, Section 2201, arising from an actual controversy between Plaintiff and Defendants as to the alleged infringement by Defendants of alleged rights which Plaintiff claims to possess by virtue of its alleged ownership of rights under a certain United States Letters Patent No. 2,631,552.

II.

Plaintiff and Defendants are competitors in the business of selling aluminum shingles.

III.

Plaintiff has charged Defendants with infringement of United States Letters Patent No. 2,631,552, issued to L. J. Korter, and made a demand for injunction restraining Defendants from manufacturing, selling, or using aluminum shingles, which allegedly infringe said Letters Patent, and for judgment and recovery for alleged infringement of said patent.

IV.

At no time have Defendants infringed said Let-

ters Patent, and at all times Plaintiff knew and now knows that Defendants do not infringe the Letters Patent.

V.

Defendants, at all times, have had and now have the right to use the articles charged to infringe without any interference from Plaintiff by reason of anything allegedly contained in or covered by said Letters Patent.

VI.

Defendants are proceeding with the use of said articles, and Defendants and their customers will be irreparably damaged unless the disputed rights of the Plaintiff and Defendants are determined and declared as promptly as possible.

VII.

Said United States Letters Patent No. 2,631,552 is unenforceable and invalid, void and of no effect in law for the reasons set forth with respect to said Letters Patent in paragraph 10 A-E of Defendants' answer to the complaint herein set forth, which reasons and each of them are now referred to and made a part hereof.

Defendants' Second Counterclaim

As a second counterclaim against Plaintiff, Defendants allege:

I.

In addition to the grounds for jurisdiction referred to in Paragraph 3 of Plaintiff's complaint and Paragraph I of Defendants' first counterclaim

filed herein, the grounds upon which this Court's jurisdiction depends are that the cause of action for unfair competition hereinafter complained of is joined with a related cause of action involving the Patent Laws of the United States.

II.

Plaintiff has been unfairly competing with Defendants as follows:

A. Plaintiff's president, L. J. Korter, and one Elias Silver conspired to destroy Perma-Lox's business. At one time, Silver was Perma-Lox's sales manager and was in a vital position to effect the success or failure of the business. Silver maliciously attempted, with the assistance and at the instigation of Plaintiff's president L. J. Korter, to destroy Defendants' financial condition and standing and otherwise discredit Defendants in the eyes of the buying public, its customers, its salesmen, its workmen, and others who might contribute to the success of Defendants' business. Furthermore, Plaintiff obtained confidential information concerning Defendants, which Plaintiff employed to their great detriment through Silver, one of whose functions was to keep Plaintiff continually informed as to the innermost workings and secrets of Defendants.

B. On information and belief, Elias Silver is presently associated with Plaintiff and Plaintiff is continuing unfairly to profit by the confidential information acquired by Silver in the course of his employment with Perma-Lox.

C. Plaintiff, through its president and author-

ized agents, has interfered with the contractual relations of Defendants by inducing and attempting to induce customers of Defendants who had entered into or were about to enter into contractual relationship with Defendants not to enter into or to cancel their contracts with Defendants by:

1. Stating prior to the commencement of the instant action that the Perma-Lox corporation was in bad standing and that the government was going to close up Defendants' business because of a conviction of infringement of Aluminum Lock's patent, and that Perma-Lox would be out of business very soon, and that its guarantee was meaningless and would be no protection to homeowners who bought roofs from Defendants.

2. Stating prior to the commencement of the instant action that Plaintiff had started a court action against Perma-Lox which would shut up its business within a short time.

3. Prior to the issuance of said patent, Plaintiff threatened customers of Defendants with patent infringement suits, maintaining that a patent had been issued to Plaintiff.

4. Making disparaging statements concerning Defendants' business, and referring to Defendants as a "fly-by-night outfit which would not last", and similar disparaging, untrue and injurious statements concerning Defendants.

D. Plaintiff's president, L. J. Korter, induced and attempted to induce salesmen and employees of Perma-Lox to sever connections with Perma-Lox by falsely representing to them that Perma-Lox

would not have merchandise or workmen (applicators) to apply roof shingles, and would be out of business within a short time.

III.

The allegations concerning Plaintiff's unclean hands appearing in Paragraph 11 A-C of the foregoing Answer are hereby adopted and incorporated for the purpose of setting forth additional unfair business practices of Plaintiff.

Defendants' Third Counterclaim

As a third counterclaim against Plaintiff, Defendants allege:

I.

This counterclaim is brought under the provisions of Section 4 of the Act of Congress of October 15, 1914, c. 323, 38 Stat. 731 (15 U.S.C. Sec. 15), entitled "An Act to Supplement Existing Laws Against Unlawful Restraints and Monopolies and for Other Purposes", known as the Clayton Act, for damages sustained by Defendants and in compensation for injuries suffered by Defendants in their business and property.

II.

Defendants have been injured by reason of the unfair competitive practices of Plaintiff and by the unlawful acts of Plaintiff in restraint of interstate commerce, and by reason of the commission by Plaintiff of other acts forbidden in Sections 1 and 2 of the Act of Congress of July 2, 1890, c. 647, 26 Stat. 209, as amended (15 U.S.C. Sections 1 and 2),

entitled "An Act to Protect Trade and Commerce Against Unlawful Restraints and Monopolies", commonly known as the Sherman Act, all as hereinafter more particularly set forth.

III.

The aluminum shingle business is a relatively new business which has developed since the last war, although there were sporadic earlier attempts, it was not until aluminum could be produced inexpensively and in quantities that the business became economically feasible.

IV.

On information and belief, Plaintiff went into the aluminum shingle business in 1947 and, by means of aggressive and ruthless business tactics, soon became the dominant factor in the business.

V.

In or about May, 1952, Defendant, Harry X. Bergman, a highly respected Portland business man, became interested in the aluminum shingle business and its possibilities. Bergman first became associated with one Philip Polsky who had been manufacturing aluminum shingles. Subsequently, Bergman decided to acquire a business of his own and bought the business of the American Aluminum Shingle Corporation, which had also been manufacturing and selling aluminum shingles. Bergman organized the American Aluminum Sales Corporation, which was the predecessor of Defendant Perma-Lox Aluminum Shingle Corporation. The business gave

every indication of being a profitable one and Bergman invested substantial sums of money therein.

VI.

The situation, after Defendants started selling shingles, was that they were Plaintiff's only competitor in the business of selling aluminum roofing shingles.

VII.

Plaintiff and Defendants sell their products in interstate commerce, and particularly in the states bordering Oregon.

VIII.

When Defendants commenced in the aluminum shingle business, Plaintiff's president, L. J. Korter, openly boasted that he would "get" Defendants and that he would run them out of business because the aluminum shingle business was his business and he would not stand for any competition.

IX.

The unfair competitive practices of Plaintiff complained of in the foregoing Second Counterclaim are hereby adopted and incorporated for the purpose of setting forth the willful, mendacious and unlawful course of conduct followed by Plaintiff in attempting to drive Defendants out of business.

X.

The hereinbefore alleged acts, agreements, monopoly, combinations and conspiracies have damaged Defendants' business, its reputation and good will,

alienated its customers, wrongfully slandered its product, wrongfully interfered with and interrupted its contracts and negotiations for contracts with its customers, and have put Defendants to great expenditure of money to continue in business and Defendants have lost profits on sales that would have accrued to them except for the unlawful and unwarranted acts and interferences of Plaintiff, all to Defendants' damage in the sum of One Hundred Thousand Dollars (\$100,000.00).

Wherefore, Defendants pray:

1. That the complaint herein be dismissed and the Plaintiff take nothing by this suit.

2. For a judgment of invalidity of United States Letters Patent No. 2,631,552.

3. For a judgment of non-infringement of said patent.

4. For an injunction restraining Plaintiff, its officers, agents, servants, and employees from directly or indirectly competing unfairly with Defendants in the sale of shingles.

5. For an injunction restraining Plaintiff, its officers, agents, servants, and employees from asserting or charging that the shingles sold by Defendants infringe said Letters Patent and from suing or threatening to sue any customer or user of Defendants' shingles, or from interfering in any manner with Defendants' business in respect thereof.

6. For recovery of Defendants' damages suffered by Plaintiff's unfair competitive practices and in-

terference with Defendants' business and violations of the antitrust laws in an amount of One Hundred Thousand Dollars (\$100,000.00), and the trebling of said damages because of the willful and wanton wrongdoing of Plaintiff and as provided by 15 U.S.C. Section 15.

7. For recovery of costs and attorney fees in this action and for such other and further relief as the Court may deem just and proper and the circumstances warrant.

ROSENBERG, SWIRE & COAN,
/s/ J. PIERRE KOLISCH,
Attorneys for Defendants

Acknowledgment of Service attached.

[Endorsed]: Filed August 17, 1953.

[Title of District Court and Cause.]

SEPARATE ANSWER OF DEFENDANT VIC-
TOR H. LANGVILLE, DOING BUSINESS
UNDER THE ASSUMED NAME OF LANG-
VILLE MANUFACTURING COMPANY

Comes now the defendant, Victor H. Langville, doing business under the assumed name of Langville Manufacturing Company and answering the plaintiff's complaint herein alleges:

I.

Admits paragraph 1 of the complaint.

II.

Admits the allegations contained in paragraphs 2(a) and 2(b) and 2(c), except the allegations in lines 15 and 16 of paragraph 2(c), and except that he denies that he has committed or is committing any acts of infringement complained of in the complaint.

III.

The defendant admits paragraph 3.

IV.

The defendant denies the allegations contained in paragraph 4 of the complaint, except that United States Letters Patent No. 2,631,552 issued to Louis J. Korter and that said patent was assigned to the plaintiff.

V.

The defendant denies paragraph 5 of the complaint.

VI.

Answering paragraph 7, the defendant denies that he has any knowledge or information sufficient to form a belief as to the allegations therein contained, except that this defendant denies that he has ever been notified by the plaintiff that he was infringing its patent.

VII.

Answering paragraph 8, the defendant denies the same and each and every allegation thereof, except that this defendant has no knowledge regarding the allegations contained in the last sentence of said

paragraph relating to the alleged contract of the defendant Bergman.

VIII.

Answering paragraph 9, this defendant denies the same and each and every allegation therein contained.

Wherefore, this defendant prays that the complaint be dismissed, that said patent No. 2,631,552 be adjudged invalid and that it be adjudged that this defendant has not infringed the same.

/s/ B. G. SKULASON,
Attorney for Defendant Victor H. Langville, doing
business under the assumed name of Langville
Manufacturing Company

Acknowledgment of Service attached.

[Endorsed]: Filed Aug. 28, 1953.

[Title of District Court and Cause.]

RULING ON PLAINTIFF'S MOTIONS DIRECTED TO DEFENDANTS' ANSWER AND COUNTERCLAIM

Note. The numbers 1, 2, 3, 4 below correspond to penciled numbers which I have placed on originals of Motions.

1. 10e. The allegations of estoppel should be enlarged. The rest is denied.

2. Paragraph 11b is stricken. Decision as to the rest reserved until the pre-trial and trial. I am not

impressed by some of the allegations, but modern patent decisions are wondrous things.

3. Decision reserved.

4. Same as 3.

I realize that the parties are closing in for hard fighting, and that the extensive briefs at this stage are for the education of the court, for the later day when serious legal issues will have to be met and resolved.

Dated November 17, 1953.

/s/ CLAUDE McCOLLOCH,
Judge

[Endorsed]: Filed Nov. 17, 1953.

[Title of District Court and Cause.]

AMENDMENT TO ANSWER

Defendants Harry X. Bergman and Perma Lox Aluminum Shingle Corporation in accordance with the Court's ruling dated November 17, 1953, hereby amend Paragraph 10(e) of their Answer in this cause by adding thereto the following information in support of the contention that plaintiff is estopped to assert an interpretation which would enable Korter Patent 2,631,552 to include the accused article.

1. Korter amendment received in Patent Office March 19, 1951 and applicant's remarks contained therein.

2. Korter amendment received in Patent Office June 6, 1952 and remarks contained therein.

3. Korter amendment received in Patent Office October 7, 1952 and remarks contained therein.

4. Korter amendment received in Patent Office October 10, 1952 and remarks contained therein.

5. Attorney's letter to Commissioner of Patents dated December 1, 1952.

6. Korter amendment received in Patent Office January 15, 1953 and remarks contained therein.

7. Affidavit of E. B. Birkenbeuel dated December 8, 1952.

8. Korter amendment received in Patent Office January 28, 1952, and remarks contained therein.

9. Korter amendment received in Patent Office February 9, 1953 and remarks contained therein.

/s/ J. PIERRE KOLISCH,
Attorney for Defendants Harry X. Bergman and
Perma Lox Aluminum Shingle Corporation.

Acknowledgment of Service attached.

[Endorsed]: Filed Dec. 3, 1953.

[Title of District Court and Cause.]

REPLY

Comes now the plaintiff above named and for reply to the affirmative defenses and counterclaims set forth in the Answer of Defendants Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation, admits, denies, and alleges as follows:

Reply to the Further and Separate Defenses

I.

Denies each and every of the allegations set forth in paragraphs 10 A-B-C-D and E, and the whole thereof.

II.

Denies each and every of the allegations set forth in paragraphs 11 A-B-C and D, and the whole thereof.

Reply to First Counterclaim

I.

Admits the allegations set forth in paragraphs numbered I, II and III of the first counterclaim.

II.

Denies each and every of the allegations set forth in paragraphs IV, V, and VII of the first counterclaim.

III.

Admits that the defendants are proceeding with the use of said articles and, except as herein specifically admitted, denies each and every of the allegations set forth in paragraph VI of the first counterclaim.

Reply to Second Counterclaim

I.

Denies each and every of the allegations set forth in the Second Counterclaim.

Reply to Third Counterclaim

Denies each and every of the allegations set forth

in the paragraphs numbered I, II, III, V, VI, VIII, IX and X of the third counterclaim.

II.

Admits that plaintiff went into the aluminum shingle business in 1947; that it developed its business by extensive advertising, selling campaigns and other lawful business practices; that it established a large and profitable business and, except as herein specifically admitted, denies each and every of the allegations set forth in paragraph IV of the third counterclaim.

III.

Admits that plaintiff is engaged in intra-state and interstate commerce and alleges that it is without knowledge or information sufficient to form a belief as to the remainder of the allegations set forth in paragraph VII of the third counter-claim.

For affirmative replies to the counterclaims set forth in the answer, plaintiff alleges:

I.

That the Court is without jurisdiction of the subject matter of the second and third counterclaims.

II.

The first counterclaim fails to state a claim against plaintiff upon which relief can be granted.

III.

The second counterclaim fails to state a claim

against plaintiff upon which relief can be granted.

IV.

The third counterclaim fails to state a claim against plaintiff upon which relief can be granted.

V.

That plaintiff commenced to do business of manufacturing and selling aluminum shingles in 1947; that in the promotion of its business, it expended large sums of money for advertising its products in newspapers, circulars and other advertising media; that it adopted trade-names, trade-marks, designs and forms of advertising material and pictures, and utilized the same in connection with the promotion of its business; that it procured the patent upon the product which it manufactured and sold and that by means of these and other activities, plaintiff built up a large and profitable business; that in the year 1952 defendants Bergman and Perma-Lox Aluminum Shingle Corporation engaged in the business of manufacturing and selling aluminum shingles in competition with plaintiff; that it adopted the form and design of aluminum shingle covered by plaintiff's patent and have been, and are now, engaged in selling aluminum shingles which infringe plaintiff's patent; that they adopted and utilized in the advertising of their product, advertising material, forms of advertising, trade-marks, trade-names, designs and pictures in their newspaper, periodical and circular advertising which were the same as and greatly resembled the

advertising material of the plaintiff; and they induced employees of the plaintiff to leave its employ and to take employment with the defendants in order to learn and avail themselves of the manufacturing and selling techniques of the plaintiff in the manufacturing and marketing of its products; that said defendants and their employees and agents, with the knowledge and consent of the said defendants, falsely represented to prospective customers that they were representatives of the plaintiff; that they were selling plaintiff's product and in some instances, that plaintiff was the representative of the defendants, and falsely, fraudulently represented that they had the right to sell aluminum shingles of the same design and character as the shingles produced by plaintiff and governed by its patent, and defendants did engage in many other and numerous unfair and dishonest competitive practices and still are engaged therein and by reason thereof, defendants are in Court with unclean hands and are not entitled to any equitable relief herein.

Wherefore, plaintiff prays for a decree and judgment in accordance with prayer of the complaint and that the defendants' counterclaims be dismissed.

/s/ S. J. BISCHOFF,

/s/ TOULMIN & TOULMIN

Acknowledgment of Service attached.

[Endorsed]: Filed Feb. 11, 1954.

[Title of District Court and Cause.]

STIPULATION

The Court having directed that the issues of the validity of the Plaintiff's patent and infringement thereof by Defendants, be segregated and tried prior to the trial of the other issues presented by the pleadings, it is

Stipulated by and between the parties hereto that all motions and proceedings now pending before the Court, to-wit:

Plaintiff's motion to compel Defendant Bergman to answer oral interrogatories on deposition;

Plaintiff's motion for inspection of documents and records;

Plaintiff's motion for the issuance of a subpoena duces tecum;

Defendants' objections to written interrogatories propounded by Plaintiff,

be deferred until after the trial and determination of the issues referred to above.

Dated: February 18, 1954.

/s/ S. J. BISCHOFF,
Attorney for Plaintiff

/s/ J. PIERRE KOLISCH,
Attorney for Defendants Bergman and Perma-Lox
Aluminum Shingle Corporation

/s/ B. G. SKULASON,
Attorney for Defendant
Langville

[Endorsed]: Filed March 25, 1954.

[Title of District Court and Cause.]

ORDER

Pursuant to the Stipulation entered into between the parties on February 18, 1954, it is hereby ordered that:

1. The answer of defendants, Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation, is hereby amended by adding to Paragraph 10-B the following:

Said alleged invention had been previously invented by Walter Nab of 4316 S. E. Hawthorn Boulevard, Portland, Oregon.

2. Paragraph 10-D of said defendants' answer be amended by erasing the balance of the paragraph, beginning with "various persons, firms * * *" and substituting: Walter Nab of 4316 S. E. Hawthorn Boulevard, Portland, Oregon.

3. Ordinary uncertified copies of United States Letters Patent, foreign patents and file wrappers of patents, and photostatic copies thereof may be

offered and used in evidence by either party with the same force and effect as the originals or duly certified copies thereof, and said patents shall be deemed to be applied for and granted on the date printed thereon, all subject to correction if error be made to appear therein and subject to the same objections as the originals or duly certified copies thereof.

4. The parties have not waived whatever rights they may have to request the court for attorneys fees for the patent phase of the case.

Dated at Portland, Oregon, this 25th day of March, 1954.

/s/ JAMES ALGER FEE,
Judge, U. S. District Court

[Endorsed]: Filed March 25, 1954.

[Title of District Court and Cause.]

PRE-TRIAL ORDER

This matter came on for pre-trial conference on the 25th day of March, 1954, on the segregated issues of validity and infringement of Korter patent No. 2,631,552, before the undersigned Judge of this court. The parties were present and represented by counsel. The Court, on its own motion, directed that the issues of validity of plaintiff's patent and infringement thereof by defendants, be segregated and tried first; that all proceedings pertaining to

all of the other issues be deferred until the trial and determination of said segregated issues and, by reason thereof, this pre-trial order is limited to the issues so segregated to be first tried and determined.

Agreed Statement of Fact

1. Plaintiff, Aluminum Lock Shingle Corporation of America, is a corporation duly organized and existing under the laws of the State of Oregon, having a regular and established place of business at 725 S.E. Powell Boulevard, Portland 2, Oregon.

2. Defendant, Harry X. Bergman, is a resident of Portland, Oregon.

3. Defendant, Perma Lox Aluminum Shingle Corporation, is a corporation duly organized and existing under the laws of the State of Oregon, having a regular and established place of business at 427 S.W. 13th Avenue, Portland, Oregon.

4. Defendant, Victor H. Langville, is an individual doing business in the State of Oregon under the assumed name of Langville Manufacturing Company, having a regular and established place of business at 2036 S. E. Grant Avenue, Portland, Oregon.

5. Plaintiff is the owner of United States Letters Patent Number 2631552 granted to Louis J. Korter on March 17, 1953. on application filed January 9, 1950, Number 137566.

6. The accused structure (aluminum shingle claimed by plaintiff to be an infringement of its patent) is plaintiff's Exhibit 1, and plaintiff's shin-

gle manufactured and sold under its patent, is plaintiff's Exhibit 2.

7. Defendant Perma-Lox Aluminum Shingle Corporation sold the accused structure and defendant Langville manufactured it for defendant, Perma-Lox Aluminum Shingle Corporation, from July 1952 to date.

Plaintiff's Contentions

I.

Korter Patent No. 2631552, owned by plaintiff, is valid and covers a new and useful process, machine, manufacture, composition of matter and new and useful improvement thereof.

II.

That the said invention was not known or used before his invention or discovery thereof, was not patented or described in any printed publication in any country before his invention or discovery or more than one year prior to his applications.

III.

That the said invention has not been in public use or on sale in the United States for more than one year prior to the application for this patent.

IV.

That Walter Nabb of 4316 S. E. Hawthorne Boulevard, Portland, Oregon, did not invent the invention covered by plaintiff's patent prior to plaintiff's invention, or at all, and did not publicly

or otherwise use, manufacture, or sell said invention at any time at any place.

V.

That said patent is not invalid for any reason.

VI.

That defendants Perma-Lox Aluminum Shingle Corporation and Harry X. Bergman committed acts of infringements of the aforesaid patent within the six years of the filing of the complaint and are committing acts of infringement thereof and are threatening to continue to do so by selling aluminum shingles that are infringements upon the plaintiff's patent.

VII.

That defendant Langville has committed, and is committing, acts of infringement of plaintiff's patent by manufacturing aluminum shingles for the defendant Harry X. Bergman and Perma-Lox Aluminum Shingles Corporation, which infringe plaintiff's patent and has so manufactured the same within six years of the filing of the complaint, and threatens to continue to do so.

VIII.

That defendants have, within six years of the filing of the complaint, infringed the said Letters Patent and are now infringing the same, and threaten to continue to infringe, by making, causing to be made, selling or causing to be sold, and/or using or causing to be used, shingles within this dis-

trict and within the jurisdiction of this Court embodying the invention disclosed and claimed in said Letters Patent owned by the plaintiff, the same having been done and is being done willfully and without the consent of the plaintiff.

IX.

That plaintiff is entitled to a decree enjoining defendants, and each of them, their officers, agents, servants and employees, from directly or indirectly making or causing to be made, selling or causing to be sold, and/or using or causing to be used, shingles covered by said Letters Patent, and from infringing upon and violating the same in any manner whatsoever, and from committing the acts herein complained of.

X.

That the affirmative defense, set forth in Paragraph 10 of the Answer of defendants Bergmann and Perma-Lox Aluminum Shingle Corporation, fails to state facts sufficient to constitute a defense.

XI.

That plaintiff's said patent is not invalid or void, for any other reasons, set forth in said Paragraph 10 of said defendants' Answer; that L. J. Korter, plaintiff's assignor, was the original, first, and sole inventor and discoverer *or* the invention covered by said Letters Patent; that it was unknown to the prior art; that the invention is not covered by any prior patent in this or any other country and said invention was not publicly used or on sale or sold

by any other patentee at any place prior to plaintiff's invention; that plaintiff's invention had not been in public use or on sale and was unknown anywhere to any person prior to plaintiff's invention or more than one year prior to the filing of the application for the patent.

XII.

That plaintiff is not estopped by any proceedings in the Patent Office of the United States to assert the validity of the aforesaid patent or the interpretation thereof in accordance with the terms and claim of said patent.

Plaintiff's Exhibits

(1) United States Letters Patent 2631552 granted to Louis J. Korter.

(2) Four (4) Aluminum Shingles manufactured according to said patent.

(3) Four (4) Aluminum Shingles manufactured and sold by defendants and claimed by patent to be an infringement of plaintiff's patent.

(4) Deposition of Harry X. Bergman, defendant, taken February 10, 1954.

(5) Diagram showing principle of Korter's invention.

(6) Chart relating element of Korter's claim to drawings of patent.

(7) Chart, comparison between Korter and Bergman shingles.

(8) Chart showing relation of Crawford's disclosure to Korter's claim.

(9) Chart showing relation of Miller's disclosure to Korter's claim.

(10) Four (4) shingles according to Crawford patent.

(11) Four (4) shingles according to Miller patent.

(12) Plaintiff's interrogatories to defendants and answers to interrogatories.

(13) Roof section made with plaintiff's shingle.

(14) Roof section made with defendants' shingle.

(15) Certified copy of record of the United States District Court of the District of Columbia in proceeding entitled "Louis J. Korter, plaintiff, vs. John A. Marzall, Commissioner of Patents, Civil Action No. 5495-52".

(16) [Stricken by the Court before trial as part of pre-trial conference Mar. 25, 1954. James Alger Fee.]

(17) Copy of Drawing of Design for interlocking metal shingle.

Defendants' Contentions

1. Korter patent 2,631,552 is invalid because:

a. All of the claimed elements are old and Korter's assembly of them produced no new or surprising result.

b. By reason of the state of the prior art existing at the time of the alleged invention by Korter of the matter disclosed in the patent, said matter was not an invention and did not require the use of any exercise of any inventive faculty for its production, was obvious to and involved only the

mechanical or ordinary skill of those versed in the art to which said matters pertain, and was not patentable.

c. L. J. Korter was not the original, or first, or sole or any inventor or discoverer of any alleged invention alleged to be patented in and by said Letters Patent.

d. The alleged invention was known to others before the alleged invention thereof by Korter.

e. The alleged invention was in public use or on sale in this country more than one year prior to the date of the application for patent.

f. The alleged invention, and every material and substantial part thereof had been shown, described and patented in and by each of the following Letters Patent of the United States and foreign countries:

- (1) Lewando: 124,963
- (2) Lewando: 140,928
- (3) Slaughter: 220,181
- (4) Cusack: 303,921
- (5) Crawford: 553,514
- (6) Clawson: 1,026,202
- (7) Belding: 1,971,517
- (8) Miller: 2,243,256
- (9) British patent to de Sincay, No. 399 of 1869

2. Defendants have not infringed the Korter patent, because:

a. the single claim in the Korter patent calls for "a drain slot disposed in the gutter of said shingle."

The accused structure does not have a drain slot in the gutter.

(1) Every element of a claim is material and the drain slot is particularly material in the Korter patent because during the prosecution of the application which resulted in the patent in suit, Korter distinguished his structure from the prior art on the basis of the drain slot.

b. The accused structure does not infringe because it has corrugations in its surface different from those in the patented shingle and the reversely turned edges are not formed in the same manner as those in the patented shingle. Furthermore, the accused shingle has a locking flange extending from the side which is not present in the patented shingle.

3. Even if it should be held that the Korter patent is valid and infringed, defendant, Harry X. Bergman, is not individually liable for infringement because he was acting merely as an officer of the defendant, Perma-Lox Aluminum Shingle Corporation, which sold the accused shingles.

4. There is no utility in the provision of a drain slot as taught in the Korter patent.

Defendants' Exhibits

25. Sample of shingles made according to Crawford, patent No. 553,514.

26. Sample of shingles made according to Miller patent No. 2,243,256.

27. Shingle made by Langville Manufacturing Company, May 1949.

[In longhand: Plaintiff's Ex. 18.] Certified copy of file wrapper of abandoned Korter application No. 776,332.

29. Certified copy of file wrapper of Korter patent No. 2,631,552.

30. Copy of Crawford patent 553,514.

31. Copy of Miller patent 2,243,256.

32. Copy of Lewando patent 124,963.

33. Copy of Lewando patent 140,928.

34. Copy of Clawson patent 1,026,202.

35. Copy of Slaughter patent 220,181.

36. Copy of Cusack patent 303,921.

37. Copy of Belding patent 1,971,517.

38. Copy of de Sincay Britist patent No. 399 of 1869.

39. Copy of Langville patent Des 166,761.

40. Copy of Pruden patent No. 1,406,757.

41. Deposition of L. J. Korter, president of plaintiff, Aluminum Lock Shingle Corporation of America, taken on September 9, 1953.

42. Sample of shingle made according to abandoned Korter application No. 776,332.

43. Sample of two felt pads.

44. Parsed claim of Korter patent.

Issues of Fact

1. Was Korter No. 2,631,552 patented in this or or foreign country before the date of Korter's application for patent?

2. Was the Korter invention known or used by others in this country before the alleged invention thereof by Korter?

3. Was Korter the inventor of the subject matter patented in patent No. 2,631,552?

4. Was the Korter invention in public use or on sale in this country more than one year prior to the date of the patent application?

5. If there is any difference between the subject matter of patent No. 2,631,552 and the prior art, is this difference one which would not have been obvious to a person having ordinary skill in the art?

6. Are any of the elements claimed in the Korter patent new?

7. If none of the elements in the patent are new, did Korter's assembly of them produce any new or surprising result?

8. Is the Korter patent valid?

9. If the Korter patent is valid does the accused structure infringe?

Issues of Law

1. Is Korter patent 2,631,552 valid?

2. If the Korter patent is valid, does the accused structure infringe?

3. If the Korter patent is valid and infringed, is the defendant, Harry X. Bergman, personally liable for infringement?

It is ordered, that the Answer of Defendants Bergman and Perma-Lox Aluminum Shingle Corporation be, and the same hereby is, deemed amended in accordance with the Stipulation of the parties filed herein dated February 18, 1954.

This pre-trial order has been formulated after

conferences at which the litigants and their respective attorneys have appeared in Court. This Order supersedes the pleadings as to the issues of fact and the issues of law between the parties segregated by this Order and will control the course of the trial except as provided in the Stipulation dated February 18, 1954, and shall not be amended except by Order of the Court to prevent manifest injustice. This order includes two orders based on stipulation of attorneys relating to the issues herein and admission of exhibits.

Dated at Portland, Oregon, this 25th day of March, 1954.

/s/ JAMES ALGER FEE,

Judge, United States District Court

/s/ S. J. BISCHOFF

/s/ H. H. BROWN

Attorneys for Plaintiff

/s/ J. PIERRE KOLISCH

/s/ B. J. SKULASON

Attorneys for Defendants

[Endorsed]: Filed March 25, 1954.

[Title of District Court and Cause.]

FINDINGS OF FACT AND CONCLUSIONS OF LAW

This cause came on for trial upon the issues of the validity of the patent described in the Pre-trial Order entered herein and the issue of infringement

by the defendants and the Court having heard the evidence, finds the fact and states the conclusions of law as follows:

I.

This suit was brought under the Patent Laws of the United States by Aluminum Lock Shingle Corporation of America, a corporation duly organized and existing under the laws of the State of Oregon, having a regular and established place of business at 725 S. E. Powell Boulevard, Portland 2, Oregon, against Harry X. Bergman as an individual, resident of Portland, Oregon, also against Perma-Lox Aluminum Shingle Corporation, a corporation duly organized and existing under the laws of the State of Oregon, having a regular and established place of business at 427 S. W. 13th Avenue, Portland, Oregon, and also against Victor H. Langville, a resident of Portland, Oregon, as an individual and doing business under the assumed name of Langville Manufacturing Company, at 2036 S. E. Grand Avenue, Portland, Oregon.

II.

Victor H. Langville manufactures for the account of Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation, aluminum shingles which infringe the patent in suit, and defendants, Harry X. Bergman and Perma-Lox Shingle Corporation receive these shingles from the said Victor H. Langville and sell such shingles and use the said shingles throughout the State of Oregon and many other States within the United States.

III.

The patent sued upon is United States Patent Number 2631552 for aluminum shingles issued to Louis J. Korter, March 17, 1953, on an application filed by the said Louis J. Korter on January 9, 1950, and co-pending application, Serial Number 776332 filed September 26, 1947, and assigned to plaintiff. Plaintiff has the legal title to and is the owner of the patent in suit.

IV.

The accused structure (aluminum shingle claimed by plaintiff to be an infringement of its patent) is plaintiff's Exhibit 3, and plaintiff's shingle manufactured and sold under its patent is plaintiff's Exhibit 2.

V.

Defendant Harry X. Bergman is the president of Perma-Lox Aluminum Shingle Corporation, its principal stockholder and the General Manager, and launched and organized the business of manufacturing and selling aluminum shingles (the accused structure) and had charge of the design of the said shingles that were manufactured by defendant Langville and sold by defendant Perma-Lox Aluminum Shingle Corporation.

VI.

Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation sold the accused structure and defendant Langville manufactured it for defendant, Perma-Lox Aluminum Shingle Corporation, from July 1952, to at least the date on which the trial

was commenced on March 25, 1954, and thereby infringed upon plaintiff's patent.

VII.

That the Korter patent No. 2,631,552 owned by plaintiff is valid and covers a new and useful article or manufacture and a new and useful improvement thereof.

VIII.

That the invention set forth in the claim of the patent in suit was not known or used before the invention or discovery by Korter, was not patented or described in any printed publication in any country before his invention or discovery, or more than one year prior to his application on which the patent is based.

IX.

That the invention has not been in public use or on sale in the United States for more than one year prior to the application for the patent in suit.

X.

That none of the various patents relied upon by the defendants as allegedly showing prior art, do in fact anticipate or in any other manner detract from the full effective coverage of the Korter claim. These alleged prior art patents are:

Lewando: 124,963

Lewando: 140,928

Slaughter: 220,181

Repp: 262,475

Cusack: 303,921

Crawford: 553,514

Clawson: 1,026,202

Pruden: 1,406,757

Talmage: 1,763,870

Belding: 1,971,517

Birch et al: 2,173,774

Faber: 2,213,519

Miller: 2,243,256

British patent to de Sincay, dated Feb. 8,
1869: 399

Langville Design Patent: 166,761

and any other patent or publication or any prior
use advanced by or on behalf of defendants.

XI.

That shingle structures or articles described and claimed by the Korter patent have not been invented, nor were they known specifically, nor used, nor were they placed on sale or sold by any one of the patentees at the places respectively named in the foregoing Letters Patent.

XII.

Plaintiff is not estopped to assert an interpretation which would enable plaintiff's claim, set forth in the Patent, to include the accused structure by the proceedings had or taken in the Patent Office during the prosecution of the Korter application and co-pending application for said Letters Patent.

XIII.

That each of said patentees named in defendants' answers, was not the first and original in-

ventor of the accused shingle structure, nor were they using reasonable diligence in adapting and perfecting the same.

XIV.

That Walter Nabb of 4316 S. E. Hawthorne Boulevard, Portland, Oregon, did not invent the invention covered by plaintiff's patent prior to plaintiff's invention, or at all, and did not specifically or otherwise use, manufacture or sell the invented shingles at any time or at any place.

XV.

That by reason of the state of the prior art existing at the time of the invention by L. J. Korter of the shingle structure described and patented in patent No. 2,631,552, the said structure was an invention and did require the use of the inventive faculty for its production, and was not obvious to and did not involve only the mechanical or ordinary skill of those versed in the art to which said structure pertained. The structure as shown and claimed in the Korter patent No. 2,631,552 is patentable and the patent is valid. In view of the state of the art, Korter is entitled to a reasonable range of equivalents.

XVI.

Plaintiff has not been guilty of any acts or conduct at any time which would constitute coming into this court with unclean hands in any of the respects set forth in the pleadings and pre-trial order.

XVII.

That each of the defendants were given notice pursuant to statute that the accused article was covered by Patent No. 2,631,552 by stamping on each shingle made and sold by plaintiff, notice of the ownership of said patent; that plaintiff had further notified the trade through advertisements that the shingle had been patented.

Conclusions of Law

I.

The Court has jurisdiction of the subject-matter of this suit and the parties thereto.

II

The L. J. Korter patent No. 2,631,552 was properly issued and validly granted.

III.

The Korter patent No. 2,631,552 is not anticipated by the prior art or by any prior use or prior patent and is a valid patent.

IV.

Each of the defendants, separately and collectively, has made, used and/or sold metal shingles which infringe the claim of the Korter patent No. 2,631,552.

V.

Defendants failed to sustain any of their contentions set forth in the pre-trial order.

VI.

That Korter is entitled to the filing date of September 26, 1947, of his application Serial No. 776,-332 for all subject matter which is common to his later filed application Serial No. 137,566 resulting in the patent in issue.

VII.

Plaintiff is entitled to the entry of a decree in its favor, adjudicating:

- (a) That the patent referred to herein is valid;
- (b) That the defendants have infringed the said patent;
- (c) That a permanent injunction should issue restraining and enjoining each of the defendants severally and jointly from committing further infringement of the Korter patent described herein;
- (d) That plaintiff is entitled to just compensation for the unauthorized past use and infringement of its patent.

Dated: September 26th, 1955.

/s/ JAMES ALGER FEE

United States Circuit Judge sitting by assignment
to this Court.

Acknowledgment of Service attached.

[Endorsed]: Filed Sept. 26, 1955.

In the United States District Court for the
District of Oregon

Civil Action No. 7084

ALUMINUM LOCK SHINGLE CORPORA-
TION OF AMERICA, Plaintiff,

vs.

HARRY X. BERGMAN, et al., Defendants.

DECREE

This cause having come on for trial, argument and briefs and having been duly considered by the Court, it is now

Ordered, Adjudged and Decreed by this Court as follows:

I.

That United States Letters Patent No. 2,631,552 issued to Louis J. Korter on March 17, 1953, and assigned to plaintiff, Aluminum Lock Shingles Corporation of America, on an application filed by the said Louis J. Korter on January 9, 1950, and co-pending application, Serial No. 776332, filed September 16, 1947, for an "aluminum shingle" is good and valid and, in particular, the claim thereof in issue in this litigation.

II.

That the plaintiff, Aluminum Lock Shingle Corporation of America, is possessed of the full and entire right, title and interest in and to said Letters

Patent, together with all rights of action for past infringement thereof.

III.

That the defendants, Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company, all individually and collectively, have infringed said Letters Patent and particularly the claim thereof.

IV.

That the plaintiff have an accounting of each of said defendants, individually and collectively, of general damages which it is entitled to recover by reason of said infringement, which shall be due compensation for making, using or selling the invention, not less than a reasonable royalty therefor, including a recovery of its court costs herein expended.

V.

The Court reserves jurisdiction to determine the amount of damages suffered by plaintiff by reason of defendants' infringement of the said patent, including the determination of the amount of attorneys' fees to be allowed to the plaintiff herein.

VI.

The defendants, Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company, their agents, servants, employees, assigns, and all other persons

in active concert or in participation with them, are enjoined, permanently, directly or indirectly, from making, causing to be made, selling or causing to be sold, using or causing to be used, any aluminum shingles which infringe the said Korter patent No. 2,631,552.

VII.

The Court reserves jurisdiction of all issues, claims and counterclaims raised by the complaint and defendants' counterclaim except the issues determined by this decree.

VIII.

That the taxation of costs to the plaintiff be deferred until the entry of the final decree herein upon the remaining issues to be disposed of.

Dated: September 26, 1955.

/s/ JAMES ALGER FEE,
United States Circuit Judge sitting by assignment
to this District.

Acknowledgment of Service attached.

[Endorsed]: Filed September 26, 1955.

[Title of District Court and Cause.]

NOTICE OF APPEAL

Notice is hereby given that defendants, Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under

the assumed name of Langville Manufacturing Company, appeal to the United States Court of Appeals for the Ninth Circuit from the Findings, Conclusions and Decree entered herein on September 26, 1955.

/s/ J. PIERRE KOLISCH,

/s/ BARDI SKULASON,

/s/ E. A. BUCKHORN,

/s/ ROBERT F. MAGUIRE,

Attorneys for Defendants

[Endorsed]: Filed October 25, 1955.

[Title of District Court and Cause.]

BOND ON APPEAL

Know All Men by These Presents:

That we, Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company, as principal, and Massachusetts Bonding and Insurance Company a Boston Corporation of Boston, Massachusetts, as sureties, are held and firmly bound unto Aluminum Lock Shingle Corporation of America in the full and just sum of Two Hundred Fifty Dollars (\$250.00) to be paid to the said Aluminum Lock Shingle Corporation of America attorneys, executors, administrators, or assigns; to which payment, well and truly to be made, we bind ourselves, our heirs, executors,

and administrators, jointly and severally, firmly by these presents. Sealed with our seals and dated this 16th day of November in the year of our Lord one thousand nine hundred and fifty-five.

Whereas, lately and at a session of the District Court of the United States for the District of Oregon, in a suit pending in said Court between Aluminum Lock Shingle Corporation of America and Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company, Civil No. 7084, a judgment was rendered against Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company and the said Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company having filed in the Clerk's Office of the said District Court Notice of Appeal to the United States Circuit Court of Appeals, for the Ninth Circuit, to reverse the judgment of the aforesaid suit, in the United States Circuit Court of Appeals for the Ninth Circuit, to be holden at San Francisco within forty (40) days from the date hereof.

Now, the condition of the above obligation is such, that if the said Harry X. Bergman, Perma-Lox Shingle Corporation, and Victor H. Langville, doing business under the assumed name of Langville Manufacturing Company shall pay the costs if the appeal is dismissed or the judgment affirmed, or

pay such costs as the appellate court may award if the judgment is modified then the above obligation to be void; otherwise to remain in full force and virtue.

HARRY X. BERGMAN,

[Seal] PERMA-LOX ALUMINUM
SHINGLE CORPORATION,

/s/ By HARRY X. BERGMAN.

LANGVILLE MANUFACTURING
COMPANY,

/s/ By V. H. LANGVILLE.

[Seal] MASSACHUSETTS BONDING
AND INSURANCE COMPANY,
Surety

/s/ By J. F. LAMBE, JR.,
Attorney-in-Fact

Countersigned:

/s/ M. H. ROSENCRANTZ,
Resident Agent

[Endorsed]: Filed November 21, 1955.

[Title of District Court and Cause.]

STIPULATION

It Is Hereby Stipulated and Agreed, subject to the approval of the Court, by and between the above-named parties, through their respective attorneys of record, as follows:

All of the original exhibits, both documentary

and otherwise, introduced and received in evidence upon trial of the above-entitled action for patent infringement shall be transmitted to the United States Court of Appeals for the Ninth Circuit as part of the transcript of record on appeal from the decree of this Court entered on the 26th day of September, 1955, to the said Court of Appeals; and it is further

Stipulated and Agreed that the Clerk of this Court may withdraw and deliver respectively to the attorneys for plaintiff and defendants for packing and transmittal to the Clerk of the United States Court of Appeals for the Ninth Circuit all the original exhibits, documentary and otherwise.

November 10, 1955.

/s/ S. J. BISCHOFF,

Attorney for Plaintiff

/s/ ROBERT F. MAGUIRE,

/s/ J. PIERRE KOLISCH,

Of Attorneys for Defendants

[Endorsed]: Filed November 29, 1955.

[Title of District Court and Cause.]

CERTIFICATE OF CLERK

United States of America,
District of Oregon—ss.

I, R. DeMott, Clerk of the United States District Court for the District of Oregon, do hereby certify that the foregoing documents consisting of Com-

plaint; Answer and Counterclaims by Harry X. Bergman, et al.; Answer by Victor H. Langville, etc.; Ruling of Judge McColloch dated November 17, 1953; Amendment to answer of defendant Bergman, et al.; Plaintiff's reply; Stipulation deferring action on certain proceedings before the court; Order re stipulation of February 18, 1954; Pre-trial order; Findings of fact and conclusions of law; Decree; Notice of appeal; Designation of record on appeal; Bond on appeal; Stipulation re forwarding exhibits to court of appeals (Order not yet signed); and Transcript of docket entries constitute the record on appeal from a judgment of said court in a cause therein numbered Civil 7084, in which Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company are the defendants and appellants and Aluminum Lock Shingle Corporation of America is the plaintiff and appellee; that the said record has been prepared by me in accordance with the designation of contents of record on appeal filed by the appellant, and in accordance with the rules of this court.

I further certify that there is enclosed herewith the reporter's transcript of proceedings, March 25, 26, 30 and 31, 1954. The attorneys for the appellants and appellee will forward the exhibits by express at a later date.

I further certify that the cost of filing the notice of appeal, \$5.00 has been paid by the appellants.

In Testimony Whereof I have hereunto set my

hand and affixed the seal of said court in Portland, in said District, this 1st day of December, 1955.

[Seal]

R. DeMOTT, Clerk

/s/ By F. L. BUCK, Chief Deputy

In the United States District Court,
District of Oregon

Civil No. 7084

ALUMINUM LOCK SHINGLE CORPORATION
OF AMERICA, Plaintiff,

vs.

HARRY X. BERGMAN, et al., Defendants.

TRANSCRIPT OF PROCEEDINGS

Portland, Oregon, March 25, 1954

Before: Honorable James Alger Fee, Chief Judge.

Appearances: Messrs. H. H. Brown and S. J. Bischoff, of Attorneys for Plaintiff; Mr. J. Pierre Kolisch, of Attorneys for Defendants Harry X. Bergman and Perma-Lox Aluminum Shingle Corporation; Mr. B. G. Skulason, Attorney for Defendant Victor H. Langville, doing business under the assumed name of Langville Manufacturing Company [1*]

The Court: Are you ready for trial, Gentlemen?

Mr. Bischoff: Yes, your Honor.

* Page numbers appearing at top of page of original Reporter's Transcript of Record.

The Court: The pre-trial order as tendered and agreed to by the parties and that the attorneys have signed is now signed and entered by the Court. I include in that these two orders based on the stipulation as part of the pre-trial order.

Mr. Brown: Your Honor, I would like to ask the Court as to whether he would like to have me make an opening statement so as to give the chronological order of the various events to which these witnesses will testify, perhaps in a detached manner. I think it might be helpful to the Court.

The Court: That is part of the trial. I suggest, Counsel, that you do whatever you want to.

Mr. Brown: Thank you, your Honor.

Your Honor, Louis J. Korter, the plaintiff patentee in this case, when he was around 16 to 20 years old was a sheetmetal worker, highly skilled in that particular trade. He knew all about roofs, of course, how they had to be built, and he knew of course all the problems connected with sheetmetal work.

In 1947, in the spring, Mr. Korter became interested in aluminum shingles. At that time aluminum, of course, was becoming more plentiful. He came up with an invention, your [2] Honor, in March of 1947 of a flat aluminum shingle in which the problem of leakage between the shingles and also the water condensation that inevitably collects underneath the shingle had been solved.

This shingle he made, of course, by hand at the start. In the summer of 1947 he had a sketch made showing this shingle. He began using these shingles

and putting them on roofs, and then in the fall of 1947 he approached a patent attorney, Mr. Birkenbeuel, to patent this particular shingle.

Actually, your Honor, it was a flat sheet of metal having interlocking flanges around the various edges. The flanges would be bent in one direction at the top, in another direction at the side, and then reversed again at the bottom and then in the original direction at the side so that these shingles, your Honor, would interlock.

Actually, Mr. Korter invented two types of interlocks at that time. He made what might be termed a V-shaped lock like that (illustrating), and another one was what may be termed the S-shaped lock. Actually, when these shingles were put together, your Honor, they made a very tight continuous surface on a roof that was leakproof and actually did get rid of the water condensation on the inner side of the shingle.

Now, this water condensation, your Honor—you will hear that term mentioned a great deal—means the water [3] that is expelled out of a body of air when that air is reduced in temperature to the dew point, and the water comes out and of course it clings to the inner side of the shingle. Unless that water were disposed of, your Honor, it would drop in big droplets, probably, to the rafters below and onto the ceiling over a period of time.

So Mr. Korter took this shingle and, incidentally, his sketch to Mr. Birkenbeuel and asked Mr. Birkenbeuel to prepare a patent application on this new shingle, which he felt was quite an achieve-

ment. An application was prepared, your Honor, but for some reason or other this scrolled or this curved S-interlock apparently was not included in that application, although it had been included in the sketch that was shown to Mr. Birkenbeuel.

That application was prosecuted right along by the patent attorney, your Honor, and in the meantime, of course, Mr. Korter was going along and putting these shingles on roofs, and doing quite well at it.

In the summer of 1948 Mr. Korter and his corporation was chosen to put an aluminum shingle roof on the Blanding Dream House right here in Portland. Perhaps your Honor may have seen it. As far as I know, your Honor, that shingle has worked satisfactorily.

Now, in order to get rid of this water condensation and get it past this interlock Mr. Korter put some ridges down [4] the shingle, and those ridges extended down from the inner surface in order to space this inner surface, your Honor, from the upper surface of this scroll of the next adjacent shingle. You see, that left a little space for this water to run and, you might say, bleed down through this very tight joint. And then in this scroll down the lower part of it Mr. Korter provided a gutter. Actually, that gutter was a little deeper, your Honor, so as this water condensation came down through the interlock into the gutter it would fan out both ways. At the end of this gutter, at both ends, your Honor, he had a little bleed opening so that the water would go through these

openings onto the outside part of the shingle below, and in that way it would be gotten onto the roof just like rainwater.

As improvements like this go along, your Honor, there is always a few changes. Mr. Korter found as he went along, particularly when he started to expand and put these roofs pretty well all over the state, that once in a while there was dirt collected in these little bleed openings that I mentioned. That happened only once in a while. In general they were quite satisfactory, your Honor. So when Mr. Korter wanted to make a 100 per cent shingle in the sense that it would work anywhere in the country, so he devised a drain slot, a drain slot that was so protected that this dust which would be liquified or mulsified, you might say, by the water [5] condensation could not get out of the drain slot at all.

Around the very end of 1948 was when he had that particular idea, your Honor. In the early part of January, 1949, perhaps the middle part, when he found that these shingles with this protected drain slot experimentally would work perfectly, he asked his die-maker, Mr. Siverson, to change the die slightly to include this drain slot I mentioned. Mr. Siverson concluded his work on the die on January 28th, 1949. Shortly thereafter, your Honor, these shingles went out into commercial use from the die made by Mr. Siverson with this drain slot.

Then around the end of 1949, your Honor, feeling that this shingle was in very fine condition, perfect, he again approached his patent attorney, Mr.

Birkenbeuel, to file an application on that. The other application which Mr. Birkenbeuel filed on September 25th, 1947, with these bleed openings that I mentioned, your Honor, was still pending in the patent office. So all of the features that had been contained in the original application, your Honor, including these ridges I have mentioned which spaced the inner surface of the shingle from the scroll, also these channels and the gutter and the drain opening, you see, were all included in this second application. So that there was a great deal in common between the first and second application, your Honor. [6]

Mr. Birkenbeuel, of course, prosecuted the two applications for a while, and then Mr. Korter, finding that practically all of the essential features of the shingle were perfected to be operated or used under any or all circumstances, decided that there was no further need, your Honor, to prosecute the first application any further, so he instructed Mr. Birkenbeuel and the firm of Toulmin & Toulmin not to do any further work on the first application, but he would prosecute the novelty in the shingle which included many of the essentials that were in the first application in the second application, which he did, your Honor.

That came out as a patent on March 17th, 1953. It is that patent that is in issue today. The first paragraph says that:

"This invention relates generally to shingles and particularly to aluminum shingles as set forth in detail in my co-pending application, Serial No. 776,-

332, filed September 26, 1947, over which the shingle shown herein is an improvement."

That was the improvement, your Honor, putting this drain slot I mentioned in place of the bleeder openings. And all other features in combination of this particular patent were included in this first application.

Mr. Korter, of course, had phenomenal success with his shingle, and had put that shingle on many homes in and [7] around Portland; in fact, in many states, beginning with 1950 or even earlier, your Honor; and in the summer of 1950 one of the defendants, Mr. Bergman, approached Mr. Korter and asked him if he would put an aluminum shingle roof on his house. Mr. Bergman at that time, your Honor, was the manager of dress shops, as I understand, here in the City of Portland. I don't don't how much experience before he had had, but anyway he was in the dress shop business at that time, and apparently knew very little, if anything, about aluminum shingles or aluminum roofs.

Mr. Korter did put that roof on Mr. Bergman's home, your Honor, in July, 1950. As far as I know, that shingle is still doing good work. That shingle has this drain slot I mentioned.

As I have stated, Mr. Korter and his company, the Aluminum Lock Shingle Corporation of America, have shingled thousands of homes, putting them all over the western part of this country, your Honor. And of course Mr. Korter laid his success not only to the fact that he has this drain slot in his shingle but also to the other elements of the

combination which have been recited in the Korter patent.

Mr. Bergman, apparently, having found the shingle worked all right, got interested in aluminum shingles. It was in July, 1952, your Honor, that Mr. Bergman incorporated under the name of the Perma-Lox Company, and he got the Langville [8] Manufacturing Company to make a shingle which we believe infringes the single claim of the Korter patent.

We filed our bill of complaint on behalf of Mr. Korter and his company around the middle of last year, as the competition was getting very intense, and we felt that the claim of the Korter patent covered exactly the shingle that Mr. Bergman was putting out with the help of the Langville Manufacturing Company to the trade.

That is the end of my opening statement, your Honor, and at this time I would like to put on my first witness, if it pleases the Court.

The Court: Do you want to make a statement?

Mr. Kolisch: I would like to make an opening statement, if you would like to hear it at this time.

The Court: All right.

Mr. Kolisch: May it please the Court, I think this case could very well be summed up as much ado about nothing. The nothing in this case happens to be a hole or a slot.

As Mr. Brown explained to the Court, Mr. Korter's patent has to do with a drain slot. Now Mr. Brown went into some detail in telling your Honor about the application which Mr. Korter filed in the

patent office in 1947. We have put the file wrapper of that application in. It is an abandoned application. It was an application on the identical shingle which we have before us now with one exception. It did not [9] have a drain slot in the gutter which permitted some excess water or water condensation, or whatever it is you are going to hear about, to drain.

This application was in the patent office beginning in 1947 and was continually rejected by the patent office. The examiner cited one patent, a Crawford patent, in 1896, which showed interlocking shingles, just exactly the way Mr. Korter thought he had invented them. Mr. Korter, as is quite clear from the file wrapper, thought that he had invented an interlocking metal shingle. He thought he was the first person who ever had an idea that you could take shingles and turn their edges reversely and work them together this way. As it turned out, many people had done it before him. The patent office cited these references.

Mr. Korter could not get any place with the patent office with that application. He tried and he tried, and he was finally rejected. Then he decided he would take an appeal, and he did take an appeal to the Board of Appeals, and the Board of Appeals wrote an opinion which is in the file wrapper in which they rejected the Korter application based on this Crawford reference as showing exactly the same invention.

In the meantime Mr. Korter's business had developed, and it seemed like a good thing from a

business point of view to have a patent, something that could overcome competitors [10] and which would have a great amount of sales appeal. Therefore, it was decided, "We must find something to patent."

Mr. Korter then had the great invention of putting a slot in the gutter, a little hole which would permit water to run out. As Mr. Brown said, the problem of condensation and letting water run out had been solved in the earlier Korter application by means of little bleeding holes at the corners so that any water that did form there could run out. But Mr. Korter had this great inventive concept of placing another hole in this gutter, and he did that and he filed a patent application on it.

That was prosecuted before the patent office rather vigorously, and it had a rough time, until finally, after a series of long personal interviews with the examiner, he was successful in convincing the examiner that there was something there, and a long specification-type claim which I will go over with you briefly was finally allowed.

It is clear, if you compare the prior abandoned Korter application with the issued patent, that the only thing he got his patent on was a hole in a gutter. The history of the Korter application in the patent office, as I said, was rather a rough one, and the file wrapper shows all the material. Part of the ammunition which Korter successfully used on the patent office was an avalanche of commercial success material. There were all sorts of testimonials and [11] affidavits from people who said, "This is

wonderful; this has revolutionized the housing business and the roofing business, and this is a great thing." Apparently the examiner finally succumbed.

It is interesting to note, though, that in the second proceeding before the patent office; that is, on the patent which is now in question, the Crawford reference was never cited by the patent office. The examiner, for some reason—it was a different examiner, as your Honor understands there are many of these examiners in each division—it was a different examiner, and he never cited the Crawford reference. He cited other references which we will place before you. However, the one reference which had knocked out the first application completely was never cited, and was never mentioned by the applicant.

Now, it is our position that this patent is invalid on its face. We don't even need prior art to show that to place a hole in a gutter to permit water to run out more freely is not a patentable invention. However, we have prior art patents which show interlocking shingles, which show drain provisions in shingles, which show all manner and means of disposing of excess water as water would be disposed of namely, by providing some sort of a hole or slot to let the water run out.

Furthermore, even if the Korter patent were valid, [12] we say we do not infringe, and for a very good reason: That is, that the accused shingle does not contain a drain slot. This is the gutter, and in the accused shingle there is no drain slot such as we have in the claim specified and pointed up in

the specification of the Korter patent. We therefore say we could not possibly infringe this patent, even if it were valid.

I would like to refer briefly to the single claim in the Korter patent, and the testimony before the Court will be simplified to the extent that we only have one claim to consider.

I will read this claim and set forth the elements:

“An aluminum shingle of rectangular shape, said shingle comprising a substantially flat sheet of metal of uniform thickness and the body of which lies substantially in the same plane,”——

Well, that is the same old flat shingle that has always existed—“corrugations in said shingle”——

We will show that corrugations have existed in shingles since they have been making shingles——

“Spaced laterally of the shingle, said corrugations forming ridges on the inner face of the shingle”——

Well, those are more ridges and curlicues——

“The lateral edges of the shingle being reversely turned on opposite faces of said shingle”——

Those are the interlocking edges——

“Providing curved outer-edge portions for interlocking the shingle with laterally adjacent shingles,”——

A curve is provided in the lateral turned edges so that they will more squarely lock one another, and we will show you, your Honor, patents which show precisely the same type of locking arrangement——

“The top and bottom edge portions of the shingle

being reversely turned on opposite faces thereof, each of said top and bottom turned-edge portions comprising a half-round portion"——

This is merely a definition of these edge portions——

"One side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion, the turned bottom portion forming a gutter"——

We are now getting to the meat, so-called, of the invention; up to now we have stated all the old standard elements in every type of metallic shingle——

"Forming a gutter and the reversely curved portion thereof being engageable with a reversely curved top edge portion of a lower adjacent shingle to form a close fit therebetween, a fastening tab"—— [14]

That is a little tab that is provided in the corner of the shingle to nail it to the roof——

"Integral with the shingle and extending from an upper corner of said shingle for securing the same to a roof structure"——

And now we come to the last element——

"And a drain slot disposed in the gutter of said shingle for draining water therefrom",——

Here we have the element which Mr. Korter inserted after he had been unsuccessful in obtaining a patent on an interlocking shingle with reversely turned edges, and he finally had this idea of putting a slot in, and we now find a drain slot disposed

in the gutter of the shingle for draining water herefrom——

“Said corrugation ridges on the inner face of the shingle adapted to space said reversely turned top edge portion of the lower adjacent shingle from the inner face of said shingle so that moisture can travel along the inner face of the shingle and into said gutter.”

This is purely a functional description of what the gutter does. It permits water to run down and out.

I have prepared a trial brief, your Honor, which I would like to hand up at this time. There is included in the trial brief of memorandum of some of the applicable law. [15]

There is a very recent decision by our Court of Appeals which I think sums up all the law applicable to this situation. It is the decision in Quickset Locks vs. Hillgren, which was decided February 3rd of this year. In that decision, the Court of Appeals discusses all the pertinent Supreme Court decisions.

The Court: There is no law in patent cases. A patent case is a question of fact.

Mr. Kolisch: Pardon?

The Court: I say, there is no law in a patent case. A patent case is a question of fact.

Mr. Kolisch: The Court of Appeals discusses that, also, the questions of fact and questions of law.

The Court: It is only a question of fact. That

is all there is, a question of fact. I don't care what the Circuit Court said about it, anyway.

Mr. Kolisch: The Court points out that there are certain standards of invention, but each case of course must be considered on its own facts. But there are standards of invention which have been applied, and against those standards of invention the patent in suit must be considered.

The Court: I don't agree with it. I don't think there is anything in that at all. It is a question of fact whether there is an invention or not. That is all there is to it.

Mr. Bischoff: Your Honor, may I be permitted to make a [16] brief observation?

The Court: Yes.

Mr. Bischoff: This patent in its final form, as was pointed out, contains one claim, but it is a combination claim consisting of a number of new elements in combination with some elements known to the prior art designed to produce a new invention, a new result, over and above the individual claims appearing in one or another of the prior art patents.

The application upon which this patent was filed, as we will contend, is to be read in connection with the former application and as a continuation of it, and it so recites in the patent, as was read to your Honor by Mr. Brown.

Now, the patent cites almost all of the prior art patents that are relied on by the defendants in this case to show anticipation except the Crawford patent and the two Lewando patents. But the Craw-

ford patent is in the case. It was discussed a great deal in the first application, and since the two will have to be read together that Crawford patent must be deemed as having been considered by the patent office, and the patent in its final form issued over all of the patents cited in the patent itself, including the Crawford patent. The only two, as I pointed out, that have not been mentioned in the file wrappers of either of the two applications and are not referred to in the patents are the two [17] Lewando patents, and the evidence on them will disclose, your Honor, that there is not the slightest resemblance to anything that we have here.

We contend here that there is a combination patent, a combination of elements, several of which are new and the result of Mr. Korter's individual inventive activities, and some of them individually appeared in one or another of the prior patents. But in combination they produce a new result, a beneficial and useful result, having novelty and all the elements necessary for a legal invention.

Now, your Honor, we have not prepared a trial memorandum because we thought that it might be preferable to do so at the conclusion of the case when the issues are crystallized. We will ask at the conclusion for the opportunity to submit such a memorandum on behalf of the plaintiff.

(Thereupon a recess was taken until 2:00 o'clock p.m. of the same day, at which time proceedings herein were resumed as follows:)

The Court: Proceed, Gentlemen.

Mr. Bischoff: May it please the Court, at this

time we desire to offer in evidence Plaintiff's Pre-Trial Exhibit No. 1, being United States Letters Patent No. 2,631,552 issued to L. J. Korter March 17, 1953.

The Court: Received.

(Copy of the Patent above referred to was thereupon received in evidence as Plaintiff's Exhibit 1.)

[See Book of Exhibits.]

Mr. Bischoff: We offer in evidence Plaintiff's Pre-Trial Exhibit 2, being four aluminum shingles made in accordance with the plaintiff's patent.

The Court: Received.

(Four aluminum shingles above referred to were thereupon received in evidence as Plaintiff's Exhibit 2, 2-A, 2-B and 2-C, respectively.)

Mr. Bischoff: I offer in evidence Plaintiff's Pre-Trial Exhibit 3, being four aluminum shingles manufactured and sold by the defendants which are claimed by plaintiff to be infringements.

(Four aluminum shingles above referred to were thereupon received in evidence as Plaintiff's Exhibits 3, 3-A, 3-B and [19] 3-C, respectively.)

Mr. Bischoff: I offer in evidence the deposition of Harry X. Bergman, marked Plaintiff's Pre-Trial Exhibit 4, taken February 10, 1954.

The Court: Admitted.

(The deposition of Harry X. Bergman above referred to was thereupon received in evidence as Plaintiff's Exhibit 4.)

Mr. Bischoff: I offer in evidence Plaintiff's Pre-

Trial Exhibit No. 12, being Plaintiff's Interrogatories to Defendants and the Answers thereto.

The Court: Admitted.

(The Interrogatories and Answers thereto above referred to were thereupon received in evidence as Plaintiff's Exhibits 12 and 12-A, respectively.)

Mr. Bischoff: I offer in evidence Plaintiff's Pre-Trial Exhibit 13, being a section of roof made with plaintiff's shingles, being the section that now appears on the easel in front of your Honor. And in that connection I would like to make a brief statement. The shingles are not fastened to the boards which would normally be the case when applied to a roof. They are fastened together on the back by a wire, and that was done so that the Court could see the contact of the shingles on the underside, which would be obscured if they [20] had been fastened to boards. That is the reason they are presented in this way. But otherwise we think they will present the position in which they would normally be when applied.

The Court: Admitted.

(The section of roof above referred to was thereupon received in evidence as Plaintiff's Exhibit 13.)

Mr. Bischoff: I offer in evidence Plaintiff's Pre-Trial Exhibit 14, being a roof section made with the defendants' shingles. That is made subject to the same explanation, your Honor.

Mr. Kolisch: No objection.

The Court: Admitted.

(The section of roof above referred to was thereupon received in evidence as Plaintiff's Exhibit 14.)

Mr. Bischoff: I offer in evidence Plaintiff's Pre-Trial Exhibit 17, copy of a drawing or design for interlocking metal shingles.

Mr. Kolisch: No objection.

The Court: Admitted.

(The drawing referred to, entitled "Design for Interlocking Metal Shingle, Applicable to New or Old Roofs," was thereupon received [21] in evidence as Plaintiff's Exhibit 17.)

Mr. Bischoff: May I make an inquiry of Counsel for a moment, your Honor, before I proceed to the next one?

Would you have any objection if I offered at this time these documents that have been identified without prior proof?

Mr. Kolisch: No, I have no objection.

Mr. Bischoff: In that case we offer in evidence Plaintiff's Pre-Trial Exhibits 5, 6, 7, 8 and 9, which are diagrams prepared and are reproductions of the diagrams appearing on the patent and the claims as recited in the patent, but with indicating lines relating the description to the diagrams for the better convenience of the Court in following the relation of the description to the diagrams.

The Court: Admitted.

(The diagram referred to, headed "Principle of Korter's Invention," was thereupon received in evidence as Plaintiff's Exhibit 5; the diagram referred to, headed "Elements of Korter's

Claim," was thereupon received in evidence as Plaintiff's Exhibit 6; the diagram referred to, headed "Comparison Between Korter and Bergman," was thereupon received in evidence as Plaintiff's Exhibit 7, the diagram referred [22] to, headed "Crawford Lacks the Following Elements of Korter's Claim," was thereupon received in evidence as Plaintiff's Exhibit 8; and the diagram referred to, headed "Miller Lacks the Following Elements of Korter's Claim," was received in evidence as Plaintiff's Exhibit 9.)

Mr. Brown: At this time we will call Max Richardson as our first witness, your Honor.

MAX C. RICHARDSON

was produced as a witness in behalf of the Plaintiff and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Brown:

Q. Will you please state your full name and your residence.

A. Max C. Richardson, 3946 Northeast 32nd Avenue, Portland, Oregon.

Q. What is your present occupation, Mr Richardson?

A. I am a consulting engineer and patent agent.

Q. For how long have you had that occupation, sir?

(Testimony of Max C. Richardson.)

A. Approximately three years in my own private practice. [23]

Q. Will you explain what a patent agent is?

A. A patent agent is anyone whom the patent office has determined by examination to be qualified to practice before the United States Patent Office and who is not a lawyer.

Q. Will you please state what your qualifications are both as an engineer and also a patent agent; academic, practical experience, or otherwise.

A. It is a long story.

Q. That is all right.

A. I have four years of college training in pure science leading to the degree of Bachelor of Science and Bachelor of Arts with physics major. I have four years of combined graduate and research work leading to the degree of Electrical Engineer from Columbia University. I have worked for the General Electric Company in Schenectady, for the New York Edison Company in New York, and I started and directed the engineering laboratories of the Hoover Suction Sweeper Company at Canton, Ohio. I was electrical engineer of the Long-Bell Lumber Company's operations at Long-Bell when they built the City of Longview. I have been manager of the sales of the underground and overhead electrical equipment for the General Electric Company out of San Francisco. And since 1929 up to the time I went to work for myself I was in charge of engineering for the Iron Fireman Manufacturing Company and a consulting engineer with them. And as

(Testimony of Max C. Richardson.)

consulting engineer I was in [24] charge of their patent matters. That brings me up to date.

Q. Are you a registered engineer of the State of Oregon? A. Yes, sir.

Q. In what branches, sir?

A. Well, being a professional electrical engineer with a great deal of mechanical experience, I took the mechanical examination and am registered as a mechanical engineer in Oregon.

Q. Have you read the Korter patent, 2,631,552 and feel that you are familiar with it?

A. Yes, sir.

Mr. Brown: At this time may I ask Mr. Price if he will give the witness a copy of Plaintiff's Exhibit 1 and also Plaintiff's Exhibit 5.

The Court: Have you got extra copies of the patent and the designs for the Court?

Mr. Brown: Yes, sir; we do.

Q. Will you please tell the Court, Mr. Richardson, as to what Mr. Korter was aiming to do. What was the purpose of his invention as you have gathered it from reading the specification and the claim?

A. In reading the specification the second paragraph says, "The main object of this invention is to devise a metal shingle of the interlocking type in which provision [25] is made to prevent leakage from heavy run-off, or condensation, or both."

That would be an object and the reason for Mr. Korter's development of this shingle. And this Exhibit No. 5 schematically indicates that Mr. Korter

(Testimony of Max C. Richardson.)

was trying to do. Condensation, of course, forms always under metal roofs, and in order to get it off Mr. Korter wanted to run it down under the shingle through the joint and onto the top of the next lower shingle to run off into the gutter. That was his object and it is illustrated here.

Mr. Brown: I would like to explain to the Court that that sketch, Exhibit 5—in fact, all of these exhibits, these sketch exhibits, or chart—were prepared under my supervision. I would like to ask the witness as to whether Exhibit 5 correctly shows Mr. Korter's invention.

A. This is a schematic drawing showing the intent and actual operation of Mr. Korter's shingle.

Q. How important or otherwise is this matter of water condensation, Mr. Richardson, in connection with metal roofs? Is it important or otherwise?

A. It is exceedingly important. The type of roof is sometimes determining in what operations can be carried on in a building. I have for some 25 years been in the business with Iron Fireman of the design and installing and consulting on air conditioning and other equipment in buildings or for [26] buildings. The roof is an exceedingly important matter in heating or air conditioning a building. With some roofs you can hold an effective comfort humidity control. Others the roofs will take out moisture and damage the property so that you must keep them necessarily dry. It is of importance generally; yes, sir.

Q. Will you now refer specifically to this struc-

(Testimony of Max C. Richardson.)

ture shown in the Korter patent element by element and, in general, describe those various elements, how they cooperate together, from the specifications in getting rid of this water condensation to which you have referred.

A. It should be remembered, as I see this patent from my patent experience and engineering experience, the patent covers an improvement in shingles for a purpose, the purpose being the stated object of such invention. The claim recites not only elements of old art to make a complete shingle but specifically defines elements of improvement.

Now, as I see the elements of improvement in this patent, the first one is in aluminum shingle, which is really an improvement. This is the first one that I know of in the art. Aluminum is an exceedingly useful material from its heat-reflective and emissive and conducting qualities, and a distinct improvement in metal roofs. However, aluminum is likely from its various qualities to cause more condensation. Also, it is not possible, or has not been possible, conveniently [27] to solder aluminum in the normal course of installation. Therefore, this could not be the old type of completely solid roof. It had to be an interlocking or shingle type of house.

I therefore make the point that being the first aluminum shingle is important. He has found a way of making a successful aluminum shingle. Of the structural points of novelty which combine to make this an effective shingle to operate in the manner required by the object of the patent, I

(Testimony of Max C. Richardson.)

would pick out of this claim the elements which combine to make this novel improvement——

Q. Excuse me, sir, but before that would you kindly go back to the drawing and show to his Honor as to how these various elements read on the drawing and give a description of the functional effect of those elements.

A. That is, the whole claim?

Q. Yes, in the specification.

A. Of course, the drawing does not show that the claim is aluminum, but it is rectangular-shaped, which is easily seen from the drawing, and “comprising substantially flat sheet of metal of uniform thickness and the body of which lies substantially in the same plane.” That is easily seen from the various figures of the drawing.

The corrugations are numbered 12, and are particularly shown in Figure 2 and Figure 6—“corrugations in said [28] shingle spaced laterally of the shingle, said corrugations forming ridges on the inner face of the shingle.” That is definitely shown in Figure 6.

Then, “the lateral edges of the shingle being reversely turned on opposite faces of said shingle”—that is the lateral edges—well, 13 is typical—“providing curved outer edge portions for interlocking the shingle with laterally adjacent shingles, the top and bottom edge portions of the shingle being reversely turned on opposite faces thereof.” That is shown in the drawings. Nos. 14 and 16 are the edges turned over in Figures 1 and 2.

(Testimony of Max C. Richardson.)

Now this is important as defining the character of those top and bottom turned edges—"each of said top and bottom turned edge portions comprising a half-round portion, one side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion, the turned bottom portion forming a gutter and the reversely curved portion thereof being engageable with a reversely curved top edge portion of a lower adjacent shingle to form a close fit therebetween." Now, the last quotation differentiates the top and bottom reverse turns from the prior art.

Then "a fastening tab integral with the shingle and extending from an upper corner of said shingle for securing the same to a roof structure." As far as I know, [29] this was the first shingle to have a single tab securing the shingle to the roof, requiring no other tab and with the nail penetrating only one thickness of metal. When I make that statement I realize that there are some other forms of shingles which are laid diagonally horizontally rather than laid with the bottom and top edges horizontally which might have such features, but this is a different art, as I understand it.

Then "and a drain slot disposed in the gutter of said shingle for draining water therefrom." That is a conventional requirement in the patent. That is to say, that the patent has for its object the collection of condensation moisture from the air and the collection of that in the gutter and the wasting of that onto the roof of the next shingle

(Testimony of Max C. Richardson.)

below. This "drain slot disposed in the gutter of said shingle for draining water therefrom" is a requirement or means for getting that water out of the gutter onto the next shingle below. In Mr. Korter's specific and shown requirement, as he is required by the patent office to make a distinct showing of one mode, Mr. Korter has illustrated that with his element 21. Of course, it could be any other element for that means and disposed in the gutter.

This is important now as defining again the object of the invention and the means required by the claim for accomplishing that object—"said corrugation ridges on the [30] inner face of the shingle adapted to space said reversely turned top edge portion of the lower adjacent shingle from the inner face of said shingle so that moisture can travel along the inner face of the shingle and into said gutter."

Now, attention should be called to Figure 4 and Figure 6 of the patent. In Figure 6 it is to be noted that 19 is the upper edge of a lower shingle, and that the small section above it as shown where the section is on Figure 4 is the cross-section of the lower edge of the upper shingle, showing that the corrugation 12 spaces the upper shingle from the curved top edge of the lower shingle in order that moisture hanging to the underside of the upper shingle can travel along the under shingle and into the gutter 20. That is important and, as far as I know, not found in the prior art. And the combination of that means, together with means for surely

(Testimony of Max C. Richardson.)

draining the water from the gutter onto the lower shingle, is the improved combination of Mr. Korter.

Mr. Brown: Will Mr. Price please give the witness Plaintiff's Exhibit 2.

Q. In your last answer, Mr. Richardson, you said something about the shingle passing through the gutter to the shingle below. You meant the water, did you not, just to clarify that point?

A. What did I say? I am sorry.

Q. The shingle passing through the opening to the shingle [31] below. You meant the water?

A. That is right; the water condensation.

Q. Yes. One other point, sir. You have used the term "combination" considerably. Will you kindly explain to the Court just what you mean by a combination in referring to this claim.

A. It is a term used in the Patent Act as a requirement—that is, one requirement for obtaining a patent. It means that if an improvement to be successfully operated requires more than one element it is a combination. The improvement includes that combination of elements and the elements of combination. And in this particular case the patent is an improved patent, and the improvement consists of a number of elements to accomplish the object of the invention.

Q. How do they normally accomplish that, sir? Do they cooperate with one another to give you a single result or not?

A. Yes. As the patent well illustrates, this is a species of shingle which would come under the Kor-

(Testimony of Max C. Richardson.)

ter patent. There would be others, but in this particular case we have these ribs on the back or on the underside that extend down into this gutter formed at the bottom, and these ribs space the upper end.

Q. Will you demonstrate it to the Court, please.

A. This being the upper end of the shingle and this being [32] the lower end, these ribs on the upper shingle space the upper shingle from the lower shingle so the water consensation can drain down into that gutter, the water condensation necessarily hanging to the underside of the upper shingle and running into that gutter. Then so much accomplished, the problem then is how to concentrate it and have it enter onto the roof at another point and to get it out on the top of the next shingle. So that Mr. Korter has done that by providing one form of slot, drain slot, which drains that water out of the gutter onto the next shingle near the mid-point of the next shingle so that it does not tend to run over into another seam. Mr. Korter's slot can be seen right at this point.

Mr. Brown: Will Mr. Price give the witness a copy of Plaintiff's Exhibit 6.

Q. I wish to ask you, Mr. Richardson, as to whether or not it is true that the ridges are designed to keep the shingle away from the wood sheathing underneath. Is that correct, sir?

A. Yes, sir. That is, it would be certainly an object and is successfully accomplished.

Q. Is that space where the shingle is kept away

(Testimony of Max C. Richardson.)

from the sheathing underneath is that an air space, sir? A. Yes.

Q. And does that body of air give rise under certain circumstances [33] to this water condensation to which you referred? A. Yes.

Q. Will you kindly explain that phenomenon to the Court.

A. It is difficult to say how far to go in a deal of that kind, but what happens is that there is necessarily a circulation of air under shingles on a roof at all times. That air is warmed from the house underneath, condensation being formed at such time as the roof is warmer than the shingle. As much as 30 per cent of the heat put in the average dwelling can be lost through a roof, and that amounts to a substantial amount of heat. Also, that heat forms a substantial draft underneath the shingle, causing a substantial circulation of air under the shingle. And as the air under the shingle is warmed it will pick up moisture from the wet roof, or the outside, or wherever it happens to be, and as it comes in contact with the underside of the shingle above will drop that moisture or, rather, the moisture will condense out onto the underside of the shingle above.

Mr. Brown: Your Honor, in explanation of Plaintiff's Exhibit No. 6, that was prepared under my supervision, and the material to the right of the drawing was merely to explain our view of the Korter patent.

Q. Referring now to Exhibit 6, Mr. Richardson,

(Testimony of Max C. Richardson.)

will you kindly go over the elements of Korter's claim; that is, his combination claim, and point out, following the red lines, as to what [34] element or elements in Korter's shingles are referred to by the elements of this combination claim, using reference characters wherever you can.

A. Of course, the first element, an aluminum shingle is shown of rectangular shape. The top red arrow shows a shingle, Figure 1, "said shingle comprising a substantially flat sheet of metal of uniform thickness and the body of which lies substantially in the same plane," and is shown generally as Figure 1 and Figure 2.

"Corrugations in said shingle spaced laterally of the shingle, said corrugations forming ridges on the inner face of the shingle."

That is the corrugations 12, and that is best shown in Figure 1 and Figure 6 and Figure 4, following the red lines.

"The lateral edges of the shingle being reversely turned on opposite faces of said shingle providing curved outer edge portions for interlocking the shingle with laterally adjacent shingles."

That is shown directly by the red lines to Figure 1.

"The top and bottom edge portions of the shingle being reversely turned on opposite faces thereof"

Is shown directly by two red lines, one pointing to the top of Figure 1 and one to the bottom of Figure 1.

"Each of said top and bottom turned edge [35]

(Testimony of Max C. Richardson.)

portions comprising a half-round portion, one side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion."

Now that is shown directly in Figure 4 as a cross-section, showing that No. 20 is the half-round section and that the upper surface of the shingle is tangent to that half-round section at the top, and that the lower side of the curved 20 is tangent to the reversely curved portion which extends out to 16.

"The turned bottom portion forming a gutter."

That turned bottom portion as shown in Figure 4 and as assembled in Figure 4 forms the gutter shown.

"And the reversely curved portion thereof being engageable with a reversely curved top edge portion of a lower adjacent shingle to form a close fit therebetween."

Now that is splendidly shown at No. 18 in Figure 4. That shows the contact tangentially of the curved ends of the upper and lower shingles, which allows that shingle to expand up and down the roof as required by temperature change without changing the tightness of the joint.

"A fastening tab integral with the shingle and extending from an upper corner of said shingle for securing the same to a roof structure." [36]

Of course, the tab is shown as pointed out by the red lines at the upper left-hand corner of Figure 1, which shows the underside of the shingle. It

(Testimony of Max C. Richardson.)

would, of course, be the upper right-hand corner of Figure 2, which shows the face of the shingle.

"And a drain slot disposed in the gutter of said shingle for draining water therefrom."

The particular form of drain slot that Mr. Korter has chosen as his mode of practicing his patent is shown at 21 in Figure 3.

And then the requirement at the bottom of the particular design and the assembly of the shingle utilizing corrugated ribs is defined as "said corrugation ridges on the inner face of the shingle adapted to space said reversely turned top edge portion of the lower adjacent shingle from the inner face of said shingle so that moisture can travel along the inner face of the shingle and into said gutter." And that again is very well shown in Figures 4 and 6.

Q. Now, is there any significance, Mr. Richardson, to this Item 2, "corrugations in said shingle spaced laterally of the shingle, said corrugations forming ridges on the inner face of the shingle," with respect either to their shape, position or size?

A. The claim can hardly be torn apart, but there is a definition for that at the last few lines of the claim, which [37] require that those corrugation ridges be adapted to space the reversely turned top edge portion of the lower adjacent shingle from the inner face of said shingle so that moisture can travel along the inner face of the shingle into the gutter. There is object, construction and definition.

Q. If those corrugations or ridges did not ex-

(Testimony of Max C. Richardson.)

tend to the lower edge of the shingle, would they perform that result that you have mentioned?

A. Very imperfectly.

Q. Is there any significance with respect to the element "each of said top and bottom turned edge portions comprising a half-round portion, one side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion," with respect to the purpose for which Mr. Korter made this invention, namely, to get rid of the water condensation?

A. Yes. Taken out of this claim, the words might be indefinite, but in the claim it is quite definite that the half-round portion must be tangent to the upper surface of the shingle and it must be long enough to reach to the top surface of the lower shingle where space is shown, and therefore it ideally forms a gutter for water to drain into it.

Q. The corrugations in the shingle and also the fact that the top and bottom turned edge portions comprise a half-round portion, do those two elements cooperate together? [38]

A. Very well, yes.

Q. Leading to Mr. Korter's object for which he made his invention?

A. Yes, sir.

Q. Is there any significance to the detail or element "the turned bottom portion forming a gutter," and the manner in which that element cooperates with the other two elements that I have mentioned to effect Mr. Korter's purpose?

A. Yes. That gutter is the intermediate element.

(Testimony of Max C. Richardson.)

It is the accumulator for the moisture and the place where that moisture is collected and then drained off through a drain slot.

Q. Is there any significance or cooperation, Mr. Richardson, between the drain slot disposed in the gutter of said shingle for draining water therefrom and the other three elements which you have mentioned in so far as they effectuate the purpose of Mr. Korter's invention?

A. Yes. There would be no object—in fact, there would be a dis-object of collecting the water in one place if you couldn't get rid of it. It would be better to let it soak into the roof all over it than to localize it.

Q. If we were to eliminate any one of the four features that I have mentioned, would Mr. Korter's object be achieved to get rid of this water of condensation which collects on the inner face of the shingle? [39]

A. Not with this general type of structure. It is always possible to get rid of moisture in some way or other, but not with the shingle structure.

Q. Will you kindly explain further as to what you mean by this particular shingle structure.

A. There have been roofs of a type which really are covered roofs over an under-roof and in which air is allowed freely to circulate through between the two roofs and use the air to take off any moisture. That is, there is enough air circulates so that moisture does not condense in a damaging way on the upper roof. Of course, that can be done.

(Testimony of Max C. Richardson.)

Q. Will you kindly state, even at the sake of repetition again, exactly what you mean by the corrugations forming ridges on the inner face of the shingle, and point to whatever figure of the patent that refers to.

A. It refers to numeral 12 in Figure 6, and wherever else shown in Figure 2. Figures 2 and 6 seem to be the ones that show that.

Q. Will you tell the Court as to whether all of these elements to which you have specifically referred cooperate together to give a unitary result; in other words, to rid the inner surface of the shingle of condensation water?

A. Yes. I would say that was so.

(Short recess.) [40]

Mr. Brown: Q. Mr. Richardson, will you kindly tell the Court as to how an aluminum shingle of the Korter type as covered in this patent is applied to a roof. What is under it?

A. Well, I would say that it would depend on the roof. It could be a skeleton roof, but normally I would say it would be a wood sheathing over rafters, and either with or without a paper diaphragm between the shingle and the wood.

Q. Would this paper diaphragm that you have mentioned tend to close up the space that has been formed by these ridges or legs 12?

A. Not appreciably.

Q. So that you would also have those spaces there for draining the water of condensation, which spaces had been caused by the ridges?

(Testimony of Max C. Richardson.)

A. You would select a paper that would do that.

Q. Isn't that paper usually called roofing paper, sir, that you have in mind?

A. Yes, building paper.

Mr. Brown: Will Mr. Price please give the witness Defendants' Exhibit 28, which is a certified copy of the file wrapper of the abandoned Korter application, No. 776,332. . .

Mr. Kolisch: Your Honor, this has not been admitted. I would like to offer it at this time if Mr. Brown wants to use it for the purpose of examination. I offer Defendants' Exhibit 28. [41]

Mr. Brown: Thank you. No objection.

The Court: Admitted. But I am not going to receive it as an offer of the defendants. It is an offer of the plaintiff. This is the plaintiff's case.

Mr. Kolisch: I merely wanted to have it put in so that he may use it and make it available.

The Court: You can offer it in evidence. That is the only way it can be done.

Mr. Brown: Yes. I will offer this certified copy of the file wrapper of the abandoned Korter application No. 776,332, as Plaintiff's Exhibit 18.

The Court: It is received.

(The file wrapper of Korter Application No. 776,332, above referred to, having been previously marked as Defendants' Pre-Trial Exhibit 28, was thereupon received in evidence as Plaintiff's Exhibit 18.)

Mr. Brown: Q. Will you kindly refer to the drawing on that application, Mr. Richardson, and tell us what you find, if anything, in common be-

(Testimony of Max C. Richardson.)

tween the structure shown on that drawing and the structure shown on the co-pending Korter application which resulted in Patent 2,631,552. You might begin by telling us, sir, as to whether any mention is made in that application of getting rid of the water of condensation.

A. I will have to look and find out.

Q. All right.

A. The first page of the specification, Lines 26 to 29, "The sixth object is to produce an interlocking shingle in which a natural drainage is provided for condensation, thereby protecting against drip from excess condensation or injury due to freezing of condensation within the interlocking joints."

Q. Does that application show any ridges extending out from the inner face of the shingle to the lower edge of the shingle?

A. Yes. In comparing the application drawing with the patent drawing, the application being the earlier one, of which the second, the patent, is a continuation, a natural relation is seen in so far as the ridges depressed from the underside of the patent drawing are shown in the application, but of less depth, and the gutter is not as perfectly formed, showing that possibly the patentee was not aware of the dimensions necessary, but he had the idea of these things.

Q. I believe you said that a gutter was disclosed in this other application. Where is that, sir?

A. That gutter is shown in Figure 8, under the top surface 26 there, in the space marked 18. I don't know whether those are the reference num-

(Testimony of Max C. Richardson.)

bers described in the patent, but that is the way it appears on the drawing.

Q. How did that water run from the gutter onto the outside surface of the shingle below?

A. In folding shingles of this type, where the corners are not sealed, undoubtedly the applicant intended or thought that the normal cutoff of the interlocked edges would allow that drainage.

The Court: It is not a question of intention, though, exactly. Would the construction that you are talking about permit that?

A. The shingle is entirely folded from a flat sheet, and as long as there is a joint at the lower edge it necessarily must seep some water. And before dirt from the roof or from the atmosphere collects and runs into those joints and seals them off they would undoubtedly do a job of draining the seepage. But to be sure that you were going to have life and usefulness to the roof for some time, undoubtedly the applicant found that he had to provide a drain of such size that it would stay open.

Mr. Brown: Q. Have you examined the so-called Bergman shingle made by the Perma-Lox people?

A. Yes, sir.

Mr. Brown: Will you, Mr. Price, kindly hand the witness Plaintiff's Exhibit 3, four aluminum shingles and at the same time, sir, will you hand the witness Plaintiff's Exhibit 7. [44] In explanation, your Honor: This chart exhibit is not an absolute copy of anything. It is merely a schematic drawing merely to show how Korter's claim can be read on

(Testimony of Max C. Richardson.)

the left-hand side on the Korter patent and on the right-hand side on the Bergman or Perma-Lox shingle.

Q. Have you examined Plaintiff's Exhibit No. 7, Mr. Richardson? A. Yes, sir.

Q. Is it accurate in detail, sir?

A. I would believe so.

Q. Will you state, sir, what it purports to show.

A. Down the center are seven numbered paragraphs indicating the elements of the Korter claim—or not exactly that, either, but both features of the claim and elements of the shingles in use. On the left-hand side in perspective is a fragmental view of a roof made with—is it the Exhibit 1 shingle? Is that the one that is here?

Mr. Bischoff: That is Exhibit 2, Mr. Richardson.

A. Exhibit 2. And on the right at the top is a perspective of a fragmental roof of the Exhibit 3 shingle. And below on the left-hand side is a fragmental perspective of a union of a horizontal and vertical joint showing fragments of three shingles and showing the interlocking arrangement and the schematic way in which the water passes through, draining from the underside of the upper shingle to the outside of the lower shingle—to the upper side of the lower shingle. And at the lower right-hand side is a similar fragmental perspective drawing of the corner of three shingles interlocked, and with a schematic showing of the water traveling from the underneath of the upper shingle to the top of the lower shingle.

(Testimony of Max C. Richardson.)

Mr. Brown: Q. How is that water condensation shown in this schematic drawing?

A. The water condensation is indicated as red dotted approximate circles, and the travel where it is indicated to be under the shingle is shown with dotted arrows, and the travel after it has passed into view is shown in the solid arrows.

Q. What do these red lines indicate, Mr. Richardson, with the arrows on the end?

A. The arrows on the drawings under "Figure 1. Corrugations forming ridges on inner face of the shingle," they undoubtedly are intended to point to the corrugation 12 of the patent and showing the ridges on the underside. The actual points of the arrows do not always coincide with what they are directed at on the drawing. And on the right-hand side undoubtedly it is intended to show the same corrugation 12 as in the Exhibit 2 species of the Korter patent or shingle.

Q. So that seven elements or features have been shown in the middle column, and each one of those features has been illustrated on this diagram in such a way that each feature can be read both on the Korter patent and also on the Bergman or Perma-Lox shingle; is that correct, sir?

A. I would say so, but it is difficult reading.

Q. Now, will you take one of the Bergman shingles, Plaintiff's Exhibit 3, and show to the Court as to how the Korter claim reads on that shingle there, sir, element for element.

A. Your Honor, "An aluminum shingle of rect-

(Testimony of Max C. Richardson.)

angular shape, said shingle comprising a substantially flat sheet of metal of uniform thickness and the body of which lies substantially in the same plane," the body being the part in between the interlocking edges.

"Corrugations in said shingle"—this is the under-side of the shingle, and this is the top side of the shingle. "Corrugations in said shingle spaced laterally of the shingle, said corrugations forming ridges on the inner face of the shingle, the lateral edges of the shingle being reversely turned"—one turned up and the other turned down—"on opposite faces of said shingle providing curved outer edge portions"—these curved outer edge portions—"for interlocking the shingle with laterally adjacent shingles"—(illustrating) I have got them upside down, but they interlock—"the top and bottom edge portions of the shingle being reversely turned on opposite faces thereof"—the top and bottom being reversely turned—"each of said top and bottom turned edge portions comprising a half-round portion, one side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion"—this is the reversely curved portion—"the turned bottom portion forming a gutter, and the reversely curved portion thereof being engageable with a reversely curved top edge portion of a lower adjacent shingle to form a close fit there between, a fastening tab integral with the shingle and extending from an upper corner of said shingle for securing the same to a

(Testimony of Max C. Richardson.)

roof structure, and a drain slot disposed in the gutter of said shingle for draining water therefrom."

Now that drain slot can be seen right through there. This is the cutoff end of this thing, and the whole thing has been enlarged to open up and make adequate drainage at all times.

"Said corrugation ridges on the inner face of the shingle adapted to space said reversely turned top edge portion of the lower adjacent shingle from the inner face of said shingle so that moisture can travel along the inner face of the shingle and into said gutter."

That, I believe, is a demonstration of this particular species of the Korter patent shingle.

Q. Do those ridges that you see projecting downwardly from the inner surface of the shingle form spaces through which the water condensation can flow around the upper surface of the scroll of the lower shingle, sir? [48]

A. You are asking about these ridges?

Q. Yes, sir.

A. Do they space the lower shingle?

Q. Yes. A. Yes, they do.

Q. Mr. Richardson, would it be possible at all, sir, to take one of Mr. Bergman's shingles and put it among two or three of Mr. Korter's shingles and have it perform the same result or not?

A. Except for a slight change in the over-all dimensions. They will interlock until you get—here are two of the Korter shingles, and there is a Berg-

(Testimony of Max C. Richardson.)

man shingle that interlocks and will do the same thing. However, as you travel along the roof you gradually run out this spacing this way, and they would not be measured side by side because this is slightly narrower this way than this is.

Q. Will you show the Court where on Mr. Bergman's shingle there is this drain slot disposed in the gutter of the shingle for draining water therefrom?

A. Yes, sir. It is right here (indicating).

Q. How does that slot compare with any other slot that is shown on Mr. Korter's shingle? Is it narrower or wider, or just how is it?

A. Well, it is obviously wider here. The normal way of making these interlock would be to just clip the corner and fold this rather closely at the corner. But in order to provide a definite drain slot this flat sheet has been clipped off enough to make this corner space here cut the corner off the shingle before they fold it.

Mr. Brown: At this time, with the Court's permission, we would like to put on a demonstration of both the Korter and the Bergman shingle, sir, on the frame that we have over here, to show that each of those shingles perform the same result or obtain the same result in substantially the same manner. We would like to have permission of the Court to put on that demonstration. It will require the use of just a little water, your Honor, but we have some tarpaulin we will put down on the floor.

The Court: You won't flood the courtroom?

Mr. Brown: No, sir; I'm sure not.

(Testimony of Max C. Richardson.)

The Court: Yes.

Mr. Brown: Thank you.

The Witness: Before we put this down, your Honor, this roof would normally have sufficient wood structure to nail through these tabs, and if we would do that you could not see the back side of it. This has just been wired across to support the tabs so you can see the back side and the water action on it.

Now what we are going to do is to simulate the formation of condensation on the back side of the roof and [50] show you how it comes out on the front side. Of course, we hope it will. It takes a little time. In order to make a mist that is small enough so it won't run off and will just collect on the thing it takes a little time to fill those gutters.

The Court: Counsel and any of the parties may come up and watch this if they want to.

Mr. Brown: Q. Mr. Richardson, what are you doing at the present time, sir?

A. I am using a fine garden spray to simulate the mist-laden air that you normally find under a cool shingle on a hot roof.

Q. You are applying that to the Korter shingles, are you not?

A. I am applying that to the underside from a distance of approximately 18 inches to the Korter shingle, the one shown in Exhibit 2.

I see we are not putting enough water on there to cause any particular commotion on the back side,

(Testimony of Max C. Richardson.)

and the water is beginning to run down the underside.

Q. Will you kindly come on this side of the roof, sir, and tell the Court what you find.

A. As described in the patent as the purpose of the invention, the water on the underside has run down the shingle, this shingle being spaced from the other one by the ends of [51] these on the side of the lower roll, and the water has gone into this gutter along here and has come out through the slot right there—you can see it, perhaps. Here is one where I can see the water—I wasn't watching it from this side, but here is one where I can see where the water is coming off. Here is one where I can see the water was coming off. Those are right at those particular points where the patentee has seen fit to provide his drain slot. You see, there has been no water drop on the floor from the back side. Possibly there was a drop. That water has come through to the front side and has come out those drain slots and come down on the roof, and the back side of the roof is all wet.

Q. Will you kindly perform the same demonstration with respect to Mr. Bergman's shingles?

A. I will be glad to.

The Court: Anybody that wants to go back there, I have no feeling about that, but I don't want anybody to ask the witness any questions.

(The witness performed a similar demonstration with the Bergman shingles.)

Mr. Brown: Q. Will you come to the front side

(Testimony of Max C. Richardson.)

of this roof section and state whether or not you find any water coming out that had been initially applied to the inner surface of the roof. [52]

A. Yes, right here. I just saw it come out right at the cutoff end there, where the shingle has been clipped. The water has traveled out there and freely down there. Here is another one. I don't see any water over there, but these two are definite demonstrations, and the only places where water came through.

Q. Will you kindly resume the stand. Mr. Richardson, these two demonstrations that you have performed in connection with Plaintiff's Exhibits 13 and 14, will you tell the Court what they show.

A. As we went over previously, the object of this invention was to take condensed moisture from the underside of an upper shingle, drain it into the gutter in turn at the lower end of the shingle, and drain it out onto the top side of the next lower shingle. The specifications show the structure, and to attain that object the claims define the structure. Both of these demonstrations have been on species of shingles on which the claim reads, and the object of the invention has been attained in both cases.

Q. By way of summation of your testimony in regard to infringement, will you kindly state whether or not in the Bergman shingle you find an aluminum shingle of rectangular shape?

A. Yes, sir.

Q. Do you find that?

A. Yes, sir. [53]

Q. Said shingle comprising a substantially flat sheet of metal of uniform thickness and the body

(Testimony of Max C. Richardson.)

of which lies substantially in the same plane. Do you find that? A. Yes, sir.

Q. Corrugations in said shingle spaced laterally of the shingle? A. Yes, sir.

Q. Said corrugations forming ridges on the inner face of the shingle? A. Yes, sir.

Q. The lateral edges of the shingle being reversely turned on opposite faces of said shingle providing curved outer edge portions for interlocking the shingle with laterally adjacent shingles?

A. Yes, sir.

Q. Do you find the top and bottom edge portions of the shingle being reversely turned on opposite faces thereof? A. Yes, sir.

Q. Each of said top and bottom turned edge portions comprising a half-round portion?

A. Yes, sir.

Q. One side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion?

A. Yes, sir. [54]

Q. The turned bottom portion forming a gutter and the reversely curved portion thereof being engageable with a reversely curved top edge portion of a lower adjacent shingle to form a close fit there between? A. Yes, sir.

Q. A fastening tab integral with the shingle and extending from an upper corner of said shingle for securing the same to a roof structure?

A. Yes, sir.

Q. And a drain slot disposed in the gutter of said shingle for draining water therefrom?

(Testimony of Max C. Richardson.)

A. Yes, sir.

Q. Said corrugation ridges on the inner face of the shingle adapted to space said reversely turned top edge portion of the lower adjacent shingle from the inner face of said shingle so that moisture can travel along the inner face of the shingle and into said gutter? A. Yes, sir.

Q. Now, Mr. Richardson, do you find that this combination of elements which cooperate together are also found in the Perma-Lox or the Bergman shingle? A. Yes, sir.

Q. And do you find that the functions of these elements in the Bergman shingle cooperate to get rid of this water condensation in substantially the same manner as the similar [55] elements of the Korter shingle or the Korter patent?

A. I would say that they were substantially so, yes.

Mr. Brown: That is all.

The Court: The Court will be in adjournment until tomorrow morning at 10:00 o'clock.

(Thereupon an adjournment was taken in the above matter until Friday, March 26, 1954.)

Portland, Oregon, Friday March 26, 1954,
Court reconvened, pursuant to adjournment, and proceedings herein were resumed as follows:

MAX C. RICHARDSON

a witness produced in behalf of the Plaintiff, resumed the stand and was further examined and testified as follows:

(Testimony of Max C. Richardson.)

Cross Examination

By Mr. Kolisch:

Q. Mr. Richardson, did you do any of the patent work concerned with either of the Korter applications? A. No, sir.

Q. At one time you were connected professionally with Mr. Birkenbeuel, weren't you?

A. You mean by association?

Q. Yes. A. No.

Q. You never did any work for Mr. Korter on the patents? A. No.

Q. Or air conditioning or any other engineering work? A. No.

Q. Now, what practical experience have you had with aluminum shingle roofs, Mr. Richardson?

A. You mean did I ever put one on?

Q. Did you ever see one put on, or did you ever put one on [57] yourself?

A. I never put one on myself, but only in passing interest. I never have made it a point or been hired to supervise, or anything of that kind.

Q. You have never had anything to do with aluminum roofs prior to this case, I take it?

A. That is right.

Q. Will you explain to the Court briefly how, if you know, a roof is put on, new construction?

A. On what type of new construction?

Q. You can take any type you wish. It doesn't make any difference.

A. Just by hearsay or what?

Q. As you understand it.

(Testimony of Max C. Richardson.)

A. As I understand it. A typical example would be a building having a hip roof with rafters and covered with wood sheathing, and over the wood sheathing would be some sort of felt paper, whichever kind or type you wanted.

Q. How is that felt paper applied?

A. It would ordinarily be applied in horizontal rows and overlapped at the upper edges and nailed.

Q. Is the felt paper laid on in rolls?

A. That would be my supposition. Now I am telling you that I never have watched that done.

Q. I just want to know what your understanding is. [58]

A. That is right.

Q. Let's say that the pitch of the roof is such as was shown on the easel there, which way would that felt be applied over the sheathing? Would it be running longitudinally or vertically?

A. It would be largely in accordance with the particular structure. It could be put on in squares or put on from rolls or it could be put on over the top horizontally. It wouldn't make too much difference.

Q. Is it your testimony, then, that the felt paper could be laid either vertically or horizontally across the sheathing?

A. Yes, and in almost any sized pieces.

Q. Now, are those separate sections of felt abutted or are they overlapped?

A. If I were doing it, I would overlap them. That is my opinion.

Q. Why would you overlap them?

(Testimony of Max C. Richardson.)

A. To take advantage of any possible leakage through the joints of air or moisture or any other thing and be sure that I had the roof covered.

Q. Is that felt paper, then, nailed to the sheathing?
A. I would nail it to the sheathing.

Q. Then what would happen?

A. I would ordinarily—that is, if it were me, I would go ahead and start the lower nailing strip, whatever you want [59] to call it, the angle strip that you put at the bottom of the roof.

Q. The starter strip?

A. That is right. Then I would go ahead and lay the roof. And I believe these shingles would lay from the lower lefthand corner, if I remember correctly. It depends on which way the shingles are made, to lay from the lower left or lower right, and proceed up the roof with them.

Q. Are you familiar with some of the other accessories that are used in roof construction?

A. Generally.

Q. Are you familiar with a valley? Do you know what I mean by a valley?

A. I know what a valley in a roof is; yes, sir.

Q. Do all roofs have valleys in them?

A. No.

Q. Do many roofs have valleys?

A. Most of them do. You could call the side of a chimney a valley, if you wanted to.

Q. I take it there are also chimney and vent jacks, and any other thing that comes through the

(Testimony of Max C. Richardson.)

roof you have to provide some sort of an accessory?

A. I will assume that with you.

Q. That is true, I suppose, of hip and ridge caps, also?

A. The ridges could be made in various ways.

Q. Do you know with respect to the patented shingle how, for instance, a valley is tied in with the rest of the shingles?

A. I would not like to say definitely. I have seen them, but I have not examined them closely.

Q. Have you examined these valleys sufficiently closely to know whether they contain any drain holes or provision for drainage?

A. I have not examined them that closely, no. I wouldn't say.

Q. You don't know whether or not there is any provision for drainage under the valleys?

A. I wouldn't know, no.

Q. Do you know approximately how much air space there is between the felt and the backs of the shingles?

A. No, I wouldn't know.

Q. Is it of the order of an inch, an eighth of an inch, or two inches? Do you have any idea?

A. Well, I would say it would be less than two inches.

Q. Now, the condensation that you were discussing yesterday, does condensation depend on the amount of air space there is?

A. The condensation would be varied by air space, yes.

(Testimony of Max C. Richardson.)

Q. Would you say that the more air space the more condensation? A. No. [61]

Q. What would you say?

A. I would like to have you talk about a particular installation, if you have one. These generalities are rather difficult.

Q. You would say that condensation was affected by air space, I take it?

A. Yes, and by air temperature.

Q. Now, if you have a shingle, a metal shingle, lying flush against a piece of felt, is there condensation between those two parts?

A. Well, Mr. Kolisch, that depends entirely on the temperature of the building, on the insulation there is between there and the shingle, the temperature outside, and so many things that the question is not a pertinent question, I would say.

Q. Well, can you answer the question Yes or No? A. No.

Q. Do you know in the average installation of the patented shingle how much of the shingle back is contacted by the felt that lies beneath it?

A. No.

Q. Is any of it contacted? A. By the felt?

Q. Yes.

A. It could be. It could be.

Q. Is it usually contacted by the felt?

A. I have never been under there. I wouldn't know. [62]

Q. As an engineer what is your opinion?

A. I would suspect that up near the top of the

(Testimony of Max C. Richardson.)

shingle it might possibly at times be contacted along the ridges on the underside.

Q. Can you tell us what the function of this felt is in a roof?

A. I can tell you a reason why I would be interested in putting it on, one reason being that I would not expect a normal sheathed roof to be a seal, and I would expect the paper to make an approximate air seal of the roof if it were not mutilated in being put on and afterward. And it would give a certain amount of insulation, very little, and it would also deaden noises which might occur due to the expansion and contraction in the roof.

Q. Would the felt ever act as a blotter to absorb any water either of condensation or that might come through the shingles from the outside?

A. If I were selecting the paper, I would select one of such character that it would be fairly impervious to water. It would not be of a blotting type.

Q. You would make it of a water-repellant or waterproof type?

A. I would fill it with water-repellant material such as a tar compound.

Q. Do you know whether or not any condensation takes place underneath the valleys in a roof?

A. I would like to testify on something that I knew definitely. Just what happens under the valley of a roof I would not know.

Q. Do you know that condensation takes place under other portions of the roof than the valley?

A. Yes.

(Testimony of Max C. Richardson.)

Q. If it takes place in other portions, is there reason to believe that it takes place under the valleys? A. Yes.

Q. Would you assume, then, that condensation takes place under the valleys as well as under the shingles? A. Yes.

Q. Assuming that there is condensation under the valleys, do you know what happens to that condensation water in the patented roof construction?

A. I believe the demonstration we made yesterday would indicate what happens to that water.

Q. I don't believe that you showed any valley construction there. A. Oh, in the valleys?

Q. Yes, under the valleys.

A. No, I wouldn't care to talk about valleys.

Q. You would not know what would happen to that water?

A. No. There is no valley in the patent, as far as I know.

Q. As far as a roof of your own patented shingle is used [64] where there are valleys—and I take it that is very common—you would not know what would happen to the water under the valley?

A. No.

Q. As far as you know, there is no provision for getting rid of it?

A. I haven't seen anything in the case that would indicate that there was.

Q. Now, do you or do you not know that in roof construction, usual roof construction, a double layer of felt is provided under the valleys?

(Testimony of Max C. Richardson.)

Mr. Bischoff: Just a moment, may it please the Court. I have allowed to pass a good many questions with regard to the use of felt and the manner in which roofs are laid without objection, believing them to be somewhat preliminary to something. But we are now delving into practices which do not affect the question of the scope of this shingle as described in the claim or its infringement, which is the issue we are now trying. This witness was not examined with respect to the construction of roofs or the manner of application. He was not qualified on that. And we are now delving into double layers of felt and other matters affecting things which are foreign to the question as to what does this patent cover and was it infringed. So we shall now object to the further pursuit of that line of examination.

Mr. Kolisch: Your Honor, this witness testified concerning condensation, and this line of inquiry is directed towards condensation. As I understand his testimony, caring for this condensation water is one feature, if not the feature, of the patent.

Mr. Bischoff: May I say a word about that? He testified to condensation in so far as it was dealt with and affected by this patented shingle. He did not testify or attempt to testify to any condensation or the carrying off of condensation from valleys or other structures or varying types of construction or laying of roofs. My theory is that the cross examination should be limited to the subject matter of his direct examination and the issue we are trying.

(Testimony of Max C. Richardson.)

The Court: I think your last point is probably well taken. I shall not rule that it is not pertinent as an issue in the case, but I do rule that it is not cross examination.

Mr. Kolisch: Very well.

Q. Was the original Korter shingle—and by that I mean the one on which the patent application was filed in 1947—a good shingle which operated satisfactorily?

A. You mean to my personal knowledge?

Q. To your personal knowledge or to your knowledge as an expert?

Mr. Bischoff: That is objected to as immaterial, may it please the Court. The issue is the validity of this patent [66] and its infringement. The question of utility and worthwhileness is not an issue in this case.

Mr. Kolisch: Certainly, your Honor, this witness testified concerning the original Korter patent and now this is just the same thing, only a little better. I think it is perfectly proper cross examination to go into the original Korter application.

The Court: I think he testified with regard to some written document in that respect. If you want to ask him questions along that line, I will permit it. I don't understand that he testified generally about that at all. I think he testified to something in the file wrapper.

Mr. Kolisch: He testified concerning the file wrapper.

(Testimony of Max C. Richardson.)

The Court: Yes, all right. Cross-examine him about that, then.

Mr. Kolisch: Q. You are familiar with the file wrapper of the original Korter application?

A. I have read it; yes, sir.

Q. Did the shingle there disclosed have reversely turned edges along four sides? A. Yes.

Q. Did that shingle have corrugations in its face? A. Yes.

Q. Did those corrugations space the shingle from the roof?

A. They were part of a pile-up that spaced the shingle from [67] the roof.

Q. Did that shingle have a gutter along its bottom edge? A. Yes.

Q. Did that shingle have a fastening tab?

A. Yes.

Q. Did the original Korter shingle—by that I mean that exemplified in the file wrapper which you studied—have a drain slot?

A. It had rudimentary drain slots that you would have in folding up a shingle of that type without sealing the corners.

Q. Was there provision in that shingle for permitting the water which might accumulate on the back of the shingle to pass to the front of a lower adjacent shingle? A. In a degree.

Q. Was any claim in this original Korter application ever allowed by the Patent Office?

Mr. Bischoff: That is objected to, may it please

(Testimony of Max C. Richardson.)

the Court. The record is in evidence and it speaks for itself.

The Court: That is correct.

Mr. Kolisch: The file wrapper is in evidence. That is right, your Honor.

Q. Do you know whether or not in the original Korter application any claims were drawn to the drainage feature?

A. To tell you frankly, I have not paid much attention to the claims in the original application. I would not want to [68] say what was in the original application as far as claims go. I have examined the specifications and the drawings.

Q. I will hand you a copy of the file wrapper and ask you to look at the claims.

A. Would you state the question again, Mr. Kolisch?

Q. Were any of the claims presented in the file wrapper of the original Korter application drawn to describe or claim the drainage features you spoke about?

A. This application, of course, shows the claims as corrected by amendment, and without going through the prosecution of the case I couldn't say exactly when those amendments were put in. But the first claim is, "A shingle of the class described consisting of a rectangular body having inturned S-shaped lips along the bottom and one side edge thereof and having out-turned S-shaped lips along the top and the other side edge thereof."

Those S-shaped lips at the top and bottom help

(Testimony of Max C. Richardson.)

to form a gutter. Now there is nothing in there that says anything specific or requires that that be part of a draining structure. But it is, in effect, a drainage structure.

Q. It is not claimed as such, though?

A. You mean whether there is anything claimed here definitely?

Q. Yes, that is right.

A. As a draining means?

Q. That is right. [69]

A. I will have to look for the word "drain." I don't see the word "drain" in the original eight claims. Am I supposed to look farther?

Q. Yes, I would like you to look at any time the claims were submitted.

The Court: Of course, I don't see exactly what you are doing. If you are just testing the witness' familiarity with this, because it is a written document obviously we can find whether there is any claim of it.

Mr. Kolisch: The only reason for doing this, your Honor, is that it might be of some assistance to your Honor in looking over this file wrapper, and whether or not the drainage was presented as——

The Court: Even if this witness told me that it was not presented, and I read it and found it was, I would feel in a little quandary.

Mr. Kolisch: I don't know, your Honor, whether his testimony would be of any assistance in that matter. If it would not be of any assistance to you, we will pass it.

(Testimony of Max C. Richardson.)

The Court: You try your case in your own way, only I don't see the point of it.

Mr. Kolisch: It is only to be of assistance to you.

The Court: You are not trying your case to assist me. I assure you of that. You are trying your case because you think you can win it. Ask the questions that you want to win [70] it, if you ask pertinent questions. I think this is not pertinent to anything that I have before me. As far as the written document is concerned, I have to construe it. The witness doesn't have to construe it, and it doesn't make any difference what he thinks about it.

Mr. Kolisch: All right. You may pass that, then.

Q. You stated, Mr. Richardson, that the drain slot called for in the claim of the Korter patent was a functional requirement. A. I would say so.

Q. And you also said that it was a means for getting water from the back side of the shingle to the front of the shingle. A. That is right.

Q. Now, is the drain slot an element or is it merely a functional statement?

A. A slot—I don't like to compete with Webster, but a slot is an opening of some kind. A drain slot is a slot that drains. Now the same slot could or could not be a drain slot, depending on how it functions.

Q. Does Korter disclose any other means in his patent for disposing of this water of condensation other than the drain slot?

A. In the normal construction of shingles of this type the corners will weep—

(Testimony of Max C. Richardson.)

Q. And by "weep" you mean permit water to pass? [71]

Mr. Bischoff: Mr. Kolisch, please permit him to conclude.

Mr. Kolisch: Go ahead, Mr. Richardson.

A. —which weeping may be good or bad, depending on whether or not those narrow openings stay open. We all know that the atmosphere deposits lots of stuff on the roof, and we all know that material sheds parts of itself on its underside when it is in contact for long periods of time, and we all know that material of that kind collected with moisture will close up small apertures. Now weep slots of that kind—that is, which are incidental to construction having interlocking edges—may function for a time to do what is hoped for. But if you recognize your problem, you will have to ordinarily do something more definite to be sure that you have drainage over the life of the roof and over the life of the shingle. So that it is somewhat a matter of degree. It is somewhat a matter of recognizing what goes on. It is somewhat a matter of discovering your problem and then inventing a means for taking care of that problem, which I believe is the function or which is the exact process that Mr. Korter went through, as I see his shingle. I don't know what he did at that time. I wasn't there. But as I see the shingle and as I see the prior application, I sense—maybe you don't want my opinion. That is up to you. [72]

Q. Go ahead.

(Testimony of Max C. Richardson.)

A. I sense the examiner's condition, I sense the attorney's condition in this case, and Mr. Korter had discovered the problem. He had solved it in a degree, but had not emphasized those things to a point where the more or less crude patent drawing was such that the examiner was convinced. And, as the case proceeded, there was confusion. The examiner had made statements because he didn't quite understand, and the picture was such that it was a logical thing to re-draw a continuing application and emphasize those things, which is, I believe, the process which the prosecution went through from the first application to the continuing application, with the various things emphasized in the continuing application.

And I believe at that time, as I read the record, the examiner withdrew his objections—not positively, but by not re-asserting them—and allowed the claim which covers the exact thing which the object of the application states, the specification shows, and the claim very definitely defines.

Q. Was it, then, the invention of Korter in Patent No. 2,631,552 to improve the drainage?

A. What is that?

Q. Was it the invention in Korter Patent No. 2,631,552, according to what you have told me, to improve the drainage [73] beyond what he had in his original filed application?

A. It was to show an improvement in shingles which would take care of the condensation from the

(Testimony of Max C. Richardson.)

underside of an upper shingle in a gutter and drain it out onto the top side of a lower shingle.

Q. I call your attention to Column 1, beginning with Line 17 of the patent, where Mr. Korter says: "Fig. 3 is a fragmentary perspective view of one corner of the shingle showing the drain slot which forms the basis of this invention."

A. Yes. I don't have the patent before me. You are referring to——

Q. Column 1, beginning with Line 17.

A. What was your comment, or what did you ask me?

Q. Referring to the quoted portion which I read you there, is it correct to state that Korter's invention here was to improve the drainage which he had present in his original application by providing another drain slot?

A. Oh, not completely, no. No, Korter showed in more prominent ways various features that were essential to the improved method. Now, you will notice in Figure 6 that in order to emphasize to the examiner what they were talking about the ridges on the underside 12 had been shown definitely a little longer. You will see that in Figure 4 the interlocking joints are shown more definitely as desired, and you will [74] see that in order to show as a species of the general requirement of a drain slot Mr. Korter has in Figure 3 shown an individual drain slot away from the corner, indicating that there was definitely a function of that type required.

Q. Does the corner 22 act as a drain, also?

(Testimony of Max C. Richardson.)

A. Undoubtedly at times.

Q. With reference to Figure 6, I call your attention to the element marked 12, corrugations. Do they rest against whatever surface is beneath the shingles throughout their length?

A. Whatever surface is beneath the shingles throughout their length?

Q. That is right.

A. I would call your attention to Figure 4, which shows that they do not.

Q. The elements 12, then, do not hold the shingle away from the roof throughout——

A. Throughout their length?

Q. Yes.

A. By indirection they rest on something else which holds the shingle away from the roof.

Q. Will you explain what you mean by “indirection.”

A. Do you see the figure 19 in figure 4?

Q. Yes.

A. Do you see that the underside of the cross-section top [75] of the upper shingle has a line on the underside indicating the figure 12—although the figure is not there, indicating element 12?

Q. Yes.

A. And that it rests on the curved surface 19?

Q. Yes.

A. That answers your question.

Q. Do you have any idea what portion of elements 12 rest directly against the felt or whatever it is beneath the shingle?

(Testimony of Max C. Richardson.)

A. Yes. You can take the lower side of the joint in figure 4 and estimate when the line of figure 20 would leave that as it goes away. You can do that with a ruler, if you want to guess.

Q. What would your estimate be? A half or three-quarters?

A. My guess would be about—what is a shingle? Maybe 8 inches tall. It is about one-eighth, maybe, or less.

Q. You mentioned in your testimony that the claim distinguished from the prior art; is that correct?

A. Yes, it must—I assume that the patent office would require that.

Q. Have you studied the prior art cited by the defendants in this case?

Mr. Bischoff: Just a moment. May it please the Court, we object to that as immaterial, irrelevant and incompetent [76] at this time. That is a matter of defense, as to whether the patent is affected by the prior art. We didn't question the witness about the relation of this patent to the prior art in our direct examination, and it is only available for discussion in the defendants' case. We start under the Patent Code with the presumption of correctness, and the Code specifically places the burden of proving the prior art and the other elements that affect validity upon the defendants.

The Court: I think it is not cross examination.

Mr. Kolisch: I merely asked the witness whether or not he had studied the prior art. He had testified

(Testimony of Max C. Richardson.)

that it was distinguished. I have not gone into the prior art. I am merely asking him whether he has studied it on the basis of his answer to the question asked on direct.

The Court: He can answer that. I don't think it makes much difference, but he may answer.

A. Yes, I have looked over the patents cited in the Korter patent application.

Mr. Kolisch: Q. Are there any new elements recited in the Korter claim?

A. Wait, now. What do you mean by that?

Q. By a new element I mean something different from that which existed before.

Mr. Bischoff: Just a moment. May I inquire, are you having reference to the prior application? [77]

Mr. Kolisch: I am referring to the Korter patent.

Mr. Bischoff: We object to that as going into the defense. He is now attempting to relate this patent to the prior art.

The Court: Yes. I think that I permitted him to answer this question and then you took off on another line, so I think it is not cross examination.

Mr. Kolisch: Q. Referring to the claim in the Korter patent, I call your attention to the word "substantially" in the second line of the claim, as well as the word "substantially" in the fourth line of the claim. Can you tell me what Mr. Korter meant by "substantially"?

A. I don't remember that. "Substantially" would mean that the interruption of surface or form

(Testimony of Max C. Richardson.)

would not be so sufficient that at a distance generally anyone would think of it as having been an angular or channel shape, or something of that kind. It is generally planar.

Q. Does the specification contain any definition of the word "substantially"?

A. I don't believe it does, no.

Q. I call your attention to the words appearing at the bottom of Column 2, and the first word in the beginning of Column 3, "close fit"—"a lower adjacent shingle to form a close fit therebetween." What did Mr. Korter mean by a close fit? [78]

A. To tell you the truth, I never have asked him.

Q. I am referring only to his specification, of course, in his patent.

A. I would say that that would refer very nicely to Figure 4, showing the close fit.

Q. By "close fit" does that mean a watertight seal?

A. No.

Q. There isn't any definition in the specifications, I take it, of what "close fit" means?

A. I don't know. I didn't look for that. Would you like to have me?

Q. No. If you don't recall, it is all right.

The Court: I don't want to interfere with your cross examination, Counsel, but I assume it will take some time more?

Mr. Kolisch: Yes, your Honor.

The Court: We will recess until 2:00 o'clock.

(Thereupon a recess was taken until 2:00 o'clock p.m. of the same day, at which time Court reconvened and proceedings herein were resumed as follows:) [79]

MAX C. RICHARDSON

a witness produced in behalf of the Plaintiff, resumed the stand and was further examined and testified as follows:

Cross Examination—(Continued)

By Mr. Kolisch:

Mr. Kolisch: Your Honor, for the purpose of examining the witness concerning the shingles I would like to be permitted to approach the witness.

The Court: That is not the custom of this Court, Counsel. You can examine from where you are.

Mr. Kolisch: Will you hand the witness Plaintiff's Exhibit 2.

Q. Mr. Richardson, you have in your hands Plaintiff's Exhibit 2, which is the patented shingle. I would like you to examine the lock which is formed along the bottom edge of the two shingles, between them, and would you please tell me if that is substantially the way in which those two shingles are joined to one another when placed on a roof.

A. I would assume that to be the case.

Q. If you will hold the shingles the way they are normally placed on a roof, will you please slip them together so that you can see where the bottom flange, locking flange, comes with respect to the

(Testimony of Max C. Richardson.)

drain hole. In other words, just slip them together—no, I don't mean that way——

The Court: Let Counsel fix them. [80]

Mr. Kolisch: I am afraid you took them apart again. I would like you to be able to keep them together so we can see the relationship of the locking flange in the upper and lower shingles. Can you slide them together so that the drain slot is brought in registry with the portion of the upper shingle?

The Witness: I don't understand. This is the way they are on the roof?

Mr. Kolisch: Yes.

The Court: Take them back and give them to Counsel again.

Mr. Kolisch: The only reason for moving these together, Mr. Richardson, is we cannot see where the drain slot is here. The drain slot is completely hidden. I take it the principle is the same whether it is like this or whether it is moved in; the lock functions the same way. We can't see the drain slot when we hold it like this, can we? I just want to be able to see where the drain slot is with respect to——

A. If you were using the shingles in other positions, you might put the drain slot in other positions. There is nothing about the patent that says where the drain slot shall be.

Q. Now, if you will try to hold them the way they are now——

Mr. Bischoff: May it please the Court, we will object to any question propounded on the arrange-

(Testimony of Max C. Richardson.)

ment of the shingles as [81] they are submitted on the ground that there is no evidence in the record that that is the way the shingles are aligned, either according to the patent or in practice, and all the evidence is to the contrary.

The Court: Overruled.

Mr. Kolisch: Q. Now, Mr. Richardson, can you see the drain slot now?

A. Right here (indicating).

Q. Can you see the drain slot with respect to the overlapping flange of the bottom shingle?

A. The upper flange of the bottom shingle?

Q. Yes. You can see it through there?

A. Yes.

Q. Does that flange come down into the gutter?

A. Yes.

Q. Does it divide that gutter longitudinally in two?

A. That could be said.

Q. Is that the way the drain slot is when the shingles are assembled? You can't see it when they are overlapped the way they are on the easel, but is that the way they are assembled, in fact?

A. I think that is so.

Q. Now, does the upper flange which rests in the gutter tend to prevent any water from getting to the drain slot?

A. No, I wouldn't say so. [82]

Q. How can water get to the drain slot with the flange in that position?

A. Easily around the end. It is not necessarily tight at the bottom.

Q. If the flange is pushed down tight against the

(Testimony of Max C. Richardson.)

bottom of the gutter, would it keep water from getting to the drain slot?

A. At that time, if it were entirely sealed off.

Q. If the water had to escape, from where would the water escape?

A. If that were the condition, it would escape around the ends.

Q. Would it escape at either end of the shingle?

A. I would think so.

Q. I hand you Plaintiff's Exhibit 3, the accused shingles, which are assembled in a similar manner. Do those shingles form a close fit along the seam as I have handed them to you?

A. I will tell you, whether shingles, or metal parts of this type form a close seam depends a lot on how they have been handled since they were made. I don't quite understand what you mean by close fit.

Q. I asked you that because it is the claim language. The patent refers to a close fit.

A. Yes.

Q. That is why I asked you whether that is a close fit. [83]

A. Well, I would think so. There doesn't seem to be any rattle in it.

Q. Can you hold those up and now turn them upside down and see if they stay together. Turn it over and just hold onto the bottom. Just hold where your hand is now and turn the shingles over and see if they fall apart. See if there is sufficient grip between the shingles to hold them to-

(Testimony of Max C. Richardson.)

gether except by gravity. Just turn the shingles in your hand, holding them straight up. Now, would you try the same thing with the patented shingle.

Thank you. You spoke earlier about dirt tending to clog the bleeder holes or drainage holes in the shingles at their corners. Is that correct?

A. Yes.

Q. Would dirt have any tendency to clog the drain hole in the patented shingle?

A. Yes, I would say so.

Q. To the same extent as it would to clog the bleeder holes at the corners?

A. What are you talking about?

Q. I am talking about dirt clogging holes in the shingles.

A. What did you just ask me a second ago when I said Yes? Did you ask me about the drain hole or the bleeder corner or what?

Mr. Kolisch: Mr. Reporter, would you read—

The Court: Never mind. Just ask him another question.

Mr. Kolisch: Q. Does the dirt which is, I take it, normally found on any roof tend to clog the drain hole in the patented shingle?

A. I would assume that it would—not the drain hole. No, I wouldn't think so.

Q. Will it clog the drainage holes at the end of the shingle? A. I would think so, in time.

Q. Why won't it clog the drain hole?

A. Probably the fineness of the material that

(Testimony of Max C. Richardson.)

would collect there would be such that it would flow off with the flow of condensation.

Q. Is that merely because the drain hole is larger than the opening at the corner of the shingle?

A. It is sufficiently large to keep open, yes.

Q. That depends, of course, on the material that is formed on the roof. If it were heavier material, it might clog?

A. That is right.

Q. Now, if the corner cutaway portions were larger, would they clog?

A. If there was a sufficient opening at the corner, they would not clog.

Q. It is a function of the size of the hole, then, as to whether it would clog?

A. Size and location. [85]

Q. Do you know whether or not there is much expansion and contraction which takes place in these shingles?

A. That is easily calculated. I don't have offhand the coefficient of the expansion of aluminum. You could easily get that.

Q. Would you say that the expansion or contraction which does take place would tend to free the corners from dirt clogging?

A. Oh, not normal expansion and contraction.

Q. There would not be sufficient contraction and expansion to open up any dirt there?

A. I wouldn't think so.

Q. And it would not affect the drain hole either?

A. I would not think so.

Q. With respect to Plaintiff's Exhibits 13 and

(Testimony of Max C. Richardson.)

14, those roof sections about which you testified yesterday, did you supervise the construction of these exhibits? A. No, sir.

Q. Do you know in what condition the shingles were when they were wired together? By that I mean were they tight or loose? Did you make any examination of them?

A. I examined them after they were this way. That is, I saw them in this condition the first time I saw them.

Q. But you could not tell from that examination whether they were tightly locked in a vertical direction or not, [86] could you?

A. You mean by tightly—that is, pulled up vertically as far as they could be pulled?

Q. Yes. A. No.

Q. Now, do you know whether the amount of water which you applied to the back of those shingles is the amount which is commonly found in roofs in this neighborhood as a result of condensation?

A. I would say that the amount that was used here was a very meager amount compared with what could be found in roofs in this neighborhood.

Q. Now, as to the pitch of the roof which was determined by the slant at which the easel was, what was the pitch on the roof?

A. My guess is it was about 45 degrees. I didn't measure the pitch. That would be a half-pitch.

Q. You would say a half-pitch?

A. I would guess.

(Testimony of Max C. Richardson.)

Q. Would you say that that is a pitch that is normally found in roofs in this neighborhood?

A. Oh, yes, a half-pitch is very often found.

Q. And the pitch will affect the rapidity of the movement of the water of condensation, I take it?

A. It should, yes. [87]

Q. In your demonstration you assumed that there was no felt pad beneath the shingles?

A. There was no felt pad beneath the shingles.

Q. So that the demonstration to that extent was not a true reproduction of something that would take place under a roof?

A. Not necessarily. A roof could be made this way.

Q. Do you know of any roofs in which they have applied aluminum shingles without putting down some sort of covering?

A. No.

Q. How could you be sure that the water which did appear on the face of the shingles leaked through the drain holes rather than through the slots at the ends or on the corners of the shingles?

A. Just by examination.

Q. How close are those slots at the ends of the shingles to the drain holes?

A. You are asking for a measurement? Would you like to have me measure it?

Q. I will hand you Exhibit 2.

A. What measurement is it you want?

Q. How close is the drain slot to the corner of the shingle?

(Testimony of Max C. Richardson.)

A. Here? The closest is about one-eighth of an inch.

Q. Did you observe whether water ran out of both ends of that shingle when it was applied on the roof, according to [88] your demonstration?

A. No, I didn't.

Q. Examining that shingle, is the lowermost portion of the drain slot in the bottom of the gutter?

A. In this particular shingle? You mean by the bottom this edge?

Q. I mean the bottom of the gutter. I don't know how else to define it.

A. Well, I am sure that I can measure anything you want here, if you will tell me what it is you want measured.

Q. I would like to know whether the drain slot, the lowest portion in that drain slot, the cutaway, is as low as the bottom of the gutter? In other words, is it formed in the bottom of the gutter or is it formed slightly above the bottom of the gutter?

A. Well, the bottom of the gutter would be wherever the tilt of the roof happened to be, and in some cases that would be right on the bottom of the gutter. In other cases it could not be.

Q. Normally you don't apply the shingles—as I hold the shingle towards you it leans towards you there—at an angle of let's say up to 45 degrees?

A. You mean you don't?

Q. You are looking at the back of the shingle?

A. That is right. [89]

(Testimony of Max C. Richardson.)

Q. All right. Where is the bottom of the gutter as you hold the shingle with respect to the slot?

A. I would say the bottom of it was right tangent with the bottom of the gutter, as nearly as I can look at it.

Q. As you change the pitch of the roof the position will change with respect to the slot?

A. That is right.

Q. Will you look at Plaintiff's Exhibit No. 7. I call your attention to the showing in the left-hand lower corner of the exhibit, which is the patent in suit, and there is an arrow which comes down from No. 3. That arrow points to the flanged portion which is bent over from the bottom shingle. Do you see what I am talking about?

A. I see that arrow; yes, sir.

Q. Now, that is broken away and lifted to show the drain slot which is marked No. 5. From what we saw before with respect to examining the physical structure of the patented shingle, would you say that this showing is correct as far as the relative location of the portion which has the arrow coming from No. 3? Doesn't that turned-over portion extend down into the gutter of the shingle rather than about half-way up to it and well above the drain slot as shown in this drawing?

A. Of course, the drawing is a little difficult to see, if you are not experienced in seeing this type of drawing. But [90] this Note 3 up there says, "Spacing between innerface and interlocking joint introduced by the ridges to permit condensation

(Testimony of Max C. Richardson.)

water to enter joint." Now with that meaning, this arrow is pointing to the space between the upper face of the upper shingle and the overturned lip of the under shingle.

Q. Yes. I am not talking about that place. The only reason I used that number was because it was the only line that went to the element in which I am interested. I am interested in the overturned lip.

A. Of which shingle?

Q. Of the bottom shingle. A. Yes.

Q. And whether or not that comes all the way down to the bottom of the gutter as we saw with respect to the physical exhibit which we examined, or is it as shown here in this exhibit?

A. This drawing, of course, is an illustration of two species of shingle of the Korter patent. And that Exhibit 2 is a species, and both the sample and these drawings conform to the claim—all three conform to the claim.

Q. Am I correct in stating your position with respect to the Korter patent as exemplified in Plaintiff's Exhibit No. 5, that Korter's invention was the provision of an interlocking shingle which would permit water from the back of the shingle [91] to drain to the front of the shingle?

A. Korter's claim for an improved shingle provides for other means of draining water from the underside of the shingle into the gutter, and then draining the gutter onto the next lower shingle.

Q. And any structure which does what you have

(Testimony of Max C. Richardson.)

now stated would in your opinion be an infringement of the Korter patent?

A. And which includes the other elements of the claim, yes.

Mr. Kolisch: That is all.

Mr. Brown: That is all.

(Witness excused.) [92]

HARRY E. SIVERSON

was produced as a witness in behalf of the Plaintiff and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Bischoff:

Q. Mr. Siverson, what business are you in?

A. I am a co-partner and manager of the Portland Die & Stamping Company.

Q. What business is that firm engaged in?

A. We manufacture sheetmetal parts and build tools and dies to custom specifications.

Q. Where is your place of business?

A. At 1500 Southwest First Avenue.

Q. How long have you been engaged in that business? A. Nine years.

Q. Did you perform any work for the Aluminum Lock Shingle Corporation in connection with the manufacture of dies for the stamping of aluminum shingles? A. Yes, I did.

Mr. Bischoff: Mr. Price, will you hand one of

(Testimony of Harry E. Siverson.)

these shingles, Plaintiff's Exhibit 2, to Mr. Siverson.

Q. Mr. Siverson, in addition to making dies for the Aluminum Lock Shingle Corporation did you also stamp aluminum shingles for that company?

A. Yes. [93]

Q. You have been handed an aluminum shingle. I will ask you if that is one of the shingles that you have stamped from dies that you have made for the Aluminum Lock Shingle Corporation.

A. Yes.

Q. Did you make dies for that company that did not have in them a provision for the drain slot that appears at the end of the flange?

A. Yes, I did.

Q. Did you change the dies to include this drain slot in the shingle?

A. Yes, we did.

Q. Will you state at whose request you changed the dies to provide for the drain slot.

A. I was requested by Mr. Korter, and we started to change the dies on January 17th, 1949.

Q. When did you complete the work of changing the dies to include the drain slot?

A. We completed the change in the dies on January 28th, 1949.

Q. Did you then begin to put shingles into production; that is, to stamp them in production after the change in the dies to include the provision for the drain slot?

A. That is true.

(Testimony of Harry E. Siverson.)

Q. And have you continued to stamp them with the same set of dies ever since? [94]

A. Yes.

Q. Have you any records with you that enable you to fix those two dates that you gave a moment ago?

A. Yes. I have a copy of the job card on which we made the change and on which we recorded the time of the change.

Q. Is that the card which recorded the hours and days and year in which the work was done?

A. Yes, that is right.

Q. And by whom done? A. Yes.

Q. Have you any other paper that enables you to fix the time? A. Yes.

Q. What?

A. We have a copy of the invoice that we sent to the Aluminum Lock Shingle Corporation after completing the change in the dies.

Q. Is the date on that invoice?

A. The date of that invoice is January 31st, 1949.

Mr. Bischoff: You may cross-examine.

Mr. Kolisch: No cross examination.

(Witness excused.)

Mr. Bischoff: Your Honor, may the witness be excused from further attendance? [95]

The Court: I haven't anything to do with that. If you want to excuse him, it is all right.

LOUIS J. KORTER

was thereupon produced as a witness in behalf of the Plaintiff and, having been first fully sworn, was examined and testified as follows:

Direct Examination

By Mr. Brown:

Q. Will you please state your name, and your residence.

A. Louis John Korter, 515 North Shore Road, Oswego, Oregon.

Q. What is your present occupation, Mr. Korter?

A. My present occupation is President of Aluminum Lock Shingle Corporation.

Q. When was your company incorporated?

A. September 25th, 1947.

Q. Have you had any experience in sheetmetal working and, if so, when and where?

A. Well, when I was 16 years old I took an apprentice course in sheetmetal and carried it through until I was 19 or 20, and it was here in Portland and also in Detroit, Michigan.

Q. For how long did that last?

A. Three to four years.

Q. In that connection did you or did you not have any occasion to know anything about water condensation? [96]

A. Yes, I did.

Q. Please relate your experience in that particular connection.

A. In the sheetmetal business the purpose of roofing roofs with metal is quite predominant, and

(Testimony of Louis J. Korter.)

condensation is a known factor to appear underneath metal roofing.

Q. When did you first conceive the general principles of the invention covered by your patent or your earlier application?

A. It was in the spring of 1947, in March.

Q. How do you set that date?

A. Well, March 16th is my birthday, and it was the following day that I became interested. That is how I happen to set that particular date.

Q. Will you tell the Court the circumstances of the conception of that invention, sir?

A. I was noticing cedar shingles that were being painted with aluminum paint, and the thought occurred, "Why don't they have roofing out of real aluminum?" That is how the idea first appeared.

Q. Did you ever make a drawing of the shingle which you had conceived in March, 1947?

A. No, I didn't.

Q. You mean in March, 1947, or at any other time?

A. In the summer of '47 I had a drawing made.

Mr. Brown: Will Mr. Price please give the witness Plaintiff's Exhibit 17.

Q. Can you identify Plaintiff's Exhibit 17, Mr. Korter?

A. Yes, I can.

Q. The legend at the bottom, "Property of L. J. Korter," at the right, and "Design and Invention by L. J. Korter" at the left, who put that on?

A. I did.

Q. At what time was that name put on?

(Testimony of Louis J. Korter.)

A. That was in the summer of 1947.

Q. I notice the date of March, 1947, in parenthesis. Why did you put on March, 1947, when you said the sketch was made in the summer of 1947?

A. Well, in March of 1947 is when I formulated the idea of this shingle, and I thought that would be the date to designate the time of this invention.

Q. Did you personally make this sketch yourself, sir? A. No, I had it made.

Q. Who made it?

A. I had a man by the name of Mr. Weber make it for me.

Q. Do you know whether Mr. Weber is living?

A. No, he is not.

Q. When you say you had the sketch made for you, you mean you told him to make the sketch?

A. He made it at my direction, yes. [98]

Q. I notice in the upper right-hand corner there appears to be something that on the original is in pencil. Will you kindly tell the Court as to when that material in pencil was made and the circumstances.

A. At the time Mr. Weber drew that lock that you notice there it occurred to me we should have an S-lock there, and I made that on this particular drawing.

Q. To whom did you show that pencil change or addition, sir?

A. I showed this drawing to my patent attorney, Mr. Birkenbeuel.

(Testimony of Louis J. Korter.)

Q. Will you kindly give us a brief description of the shingle shown on the drawing.

A. Well, it shows a rectangular shingle with inverted ridges or legs and four-way interlocking beads, both laterally and horizontally, and a nailing tab. And in the lower gutter on each end an opening for condensation to drain out of the gutter. It shows the graining design that is on the panel, and it also shows an S-type of lock on the lower part on the right-hand side there. I think that answers the question.

Q. Will you tell the Court as to whether or not it shows a ridge or series of ridges extending from the inner side of the shingle? A. Yes, it does.

Q. I believe you stated, sir, that you showed this sketch to [99] Mr. Birkenbeuel. Do you know whether or not all of the details of this sketch, including the so-called S-interlocking joint, were incorporated in your earlier application?

A. I instructed Mr. Birkenbeuel to do precisely what is explained there. However, for some reason or other the S-lock was never incorporated in that patent application.

Q. Were you making shingles at this particular time, Mr. Korter?

A. I was making some hand-made shingles at this particular time.

Q. And did those shingles incorporate the lock shown at the upper right-hand corner of this sketch or the details that are shown in pencil as far as the lock is concerned? A. I made both kinds.

(Testimony of Louis J. Korter.)

Q. These hand-made shingles, were those being made only experimentally or for the commercial market?

A. I was making both kinds to decide which one I preferred.

Q. Now, as you went along in the fall of 1947 do you know if Mr. Birkenbeuel did actually file that patent application on or about that time?

A. Yes, he did.

Q. What was the next thing you did after that, sir, in pursuance to your general purpose of providing a shingle that took care of this water condensation after you had authorized Mr. Birkenbeuel to file your first application? [100]

A. I authorized Mr. Siverson of the Portland Die & Stamping Company to begin to make dies for the manufacture of this shingle, and after he did that I instructed him to proceed to manufacture it, which he did.

Q. I now show you three shingles marked Plaintiff's Exhibits 2-A, 2-B and 2-C, and ask you whether or not you can identify the same. No, I will withdraw that question.

Will you kindly describe the shingles that were made after Mr. Siverson made the die and you put these out to commercial use. Were they similar to that shown on the sketch with this S-joint, or were they otherwise?

A. They were manufactured with the S-joint.

Q. Will you tell the Court whether or not your company put the shingles on the Blanding Dream

(Testimony of Louis J. Korter.)

House in the summer of 1948? A. We did.

Q. Did those shingles conform to the sketch, Plaintiff's Exhibit 17, with the S-interlocking joint?

A. Yes, sir.

Q. In that case how was the water excluded from the gutter?

A. Well, if you will notice, on this drawing it shows an opening that allows this water to drain out of the gutter.

Q. Was that opening effective?

A. It was in most cases. However, occasionally we found where the conditions changed, where there was wind and dust, [101] it did clog up the openings on the lower gutter on special occasions. That bothered me, and I wanted a shingle that worked on every type of roof and every type of location. So that is why I put the drain slot in the underside of the gutter.

Q. Has any complaint ever come to your attention, sir, as to the ineffectiveness of these bleeder openings at the ends as far as the Blanding Dream House is concerned? A. No, sir.

Q. In other words, those shingles are considered satisfactory as of the summer of 1948?

A. Yes, sir.

Q. You mentioned the fact that later you incorporated a so-called drain slot in the shingle to take care of all conditions of operation, regardless of location. About when was that idea conceived of putting in the drain slot?

A. That was in the fall of 1948.

(Testimony of Louis J. Korter.)

Q. During 1948 were you continually improving or experimenting with these shingles?

A. I was.

Q. And as a result of conceiving that improvement in the fall of 1948 what did you do?

A. After I decided on how to improve the shingle with the drain slot, I contacted my die-maker and instructed him to proceed accordingly and make a drain slot to my directions. [102]

Q. That was Mr. Siverson?

A. Mr. Siverson.

Q. The gentleman who just testified?

A. Yes.

Q. When was that, approximately, Mr. Korter?

A. That was the first part of 1949, in January.

Q. Do you know of your own knowledge as to when that work was completed by Mr. Siverson of changing the dies to include this drain slot?

A. Yes. It was on January the 28th that it was completed and the dies were put back into production and we started manufacturing again.

Q. That is, in the year 1949?

A. 1949, January 28th.

Q. Have any major changes been made at all in the design or construction of your shingle since January 28th, 1949? A. No, sir.

Q. Did you go into commercial production, commercial use, since that time with respect to your latest improved shingle? A. Yes, sir.

Q. To what extent, Mr. Korter, have you and your company sold these shingles, not only in

(Testimony of Louis J. Korter.)

Portland but elsewhere? Give the names of the states or the number of locations.

A. We have sold the shingle throughout the Pacific Coast and the Midwestern States as far back as the Mississippi [103] River.

Q. Will you kindly tell us as to what contact you had with Mr. Bergman in connection with roofs and when.

A. He came to my office in 1950,—July, 1950,—and asked me to sell him a roof.

Q. Did you apply an aluminum shingle roof to Mr. Bergman's home? A. I did.

Q. You of course did file a second application on your improved shingle that added the drain slot. Do you recall the circumstances of when that application was filed?

A. I contacted Mr. Birkenbeuel, my patent attorney, in the fall of '49 and instructed him to incorporate this new drain slot in the application.

Q. Do you recall after your application was filed as to whether your original application was still pending that Mr. Birkenbeuel had originally filed?

A. At the time I asked him to incorporate the drain slot the application was still pending.

Q. Do you know any of the circumstances, sir, under which the prosecution of the first application was suspended and why?

A. I beg your pardon?

Q. Do you know the circumstances under which the prosecution of your first application was suspended and why? [104]

(Testimony of Louis J. Korter.)

A. Well, all I know is that I told Mr. Birkenbeuel, my patent attorney, to include this new drain slot opening in the gutter into a new application, and I instructed him to incorporate all of the features that I had in the original application into this new application in combination with all the elements that I had previously.

Q. Will you tell us what those features were that were taken out of your earlier application that were incorporated into the second application at the time it was filed.

A. Well, we had the inverted ridging and this S-type lock in the lower gutter, and the drain slot—the drain slot, the inverted ridges, and the S-type lock.

Q. You have before you Plaintiff's Exhibits 2-A, 2-B and 2-C. Will you just take up one of those and show the Court where you find these various elements that you mentioned that were made according to your improved patent.

A. We have the inverted ridges shown here, and we have the S-type lock. We have the drain slot, we have the nailing tab, and the ridging.

Q. Will you put three of those together, Mr. Korter, and also explain to the Court the manner in which the drain slot remains open.

A. The drain slot remains open?

Q. Yes, when you put them together.

A. Your Honor, you will notice this drain slot in this lower [105] right-hand corner right here,

(Testimony of Louis J. Korter.)

and this locking principle I have here remains open underneath with a protected area.

Q. In that position, Mr. Korter, is the drain slot protected from dust and dirt?

A. That is the idea of it being underneath this particular flange.

Mr. Brown: Will Mr. Price kindly give to the witness the four aluminum shingles marked Plaintiff's Exhibit 3.

Q. Mr. Witness, will you take one of Plaintiff's Exhibit 2 and one of those of Plaintiff's Exhibit 3 and show the Court in what respect those two exhibits are similar or different.

A. In my shingle, the exhibit here, I have the inverted ridging, and in this shingle they have the inverted ridging. In this shingle we have the S-type lock, as you notice, and it is so here. We have the graining or ridging, and we have the same thing here. We have the locking principle at the top and the side the same. We have the locking principle on the bottom here, and here in this one the same. And the tab here and the tab here, the nailing tab, right here, and the same here. It is the equivalent of my shingle in principle and in operation.

Q. Will you please state to the Court whether or not, in your opinion, the claim in the Korter patent does cover your shingle as you have shown it to the Court?

A. It does. [106]

Q. So on the basis of your demonstration, sir, you conclude that Korter's claim does read on the Bergman shingle; is that correct?

A. I do.

(Testimony of Louis J. Korter.)

Q. At the present time, Mr. Korter, how are your sales doing? Are they extensive or otherwise in aluminum shingle work?

A. They are extensive.

Q. Would you give some idea to the Court as to how extensive at the present time, sir.

A. The progress of the corporation has been consistently growing year after year, and it is our plan and program to be national, coast to coast, this year.

Mr. Brown: You may cross-examine.

Cross Examination

By Mr. Kolisch:

Q. You say your sales have been extensive. Do you advertise a lot, Mr. Korter?

A. We advertise extensively.

Q. Have you always advertised extensively?

A. We have.

Q. That was before you obtained the patent as well as after?

A. We always advertised extensively.

Q. Were your sales good prior to your obtaining a patent? [107]

A. Our sales have been consistently getting better as we have gotten older.

Q. Where did you meet Mr. Weber?

A. Where did I meet Mr. Weber?

Q. Yes.

A. It one time I lived on Brooklyn Street and he lived right in back of me.

Q. Did you know Mr. Weber for some time?

(Testimony of Louis J. Korter.)

A. Yes, I did.

Q. Did you know that he was an inventor?

A. No, I didn't.

Q. Did you know that he had some patents in his name?

A. No, I didn't.

Q. When you went to Mr. Weber with your idea, as you testified, what did you tell Mr. Weber?

A. I asked him if he would like to go to work and make up some hand-made shingles for me.

Q. I take it he said he would?

A. He wasn't working. He was on relief, and I thought it would be a good idea for him to make some extra money. And he proceeded at my direction to make the hand-made shingles for me so that I could proceed on my other work in promoting the shingle.

Q. At the time that you told Mr. Weber to make up the shingles I take it you explained everything to him, how the shingle was [108] to be made in form?

A. That is right.

Q. Had you ever seen any shingles that had reversely turned edges prior to that time?

A. Not on all four sides.

Q. You didn't know that there was such a thing as a shingle with reversely turned edges on all four sides?

A. I knew of one shingle, called the Reynolds Aluminum shingle, that I became acquainted with in the summer of 1949, and that shingle only had reverse curved edges on the top and bottom. It didn't have it on the lateral sides.

(Testimony of Louis J. Korter.)

Q. Do you know whether or not there were shingles with reversely turned edges?

A. Only that——

Mr. Bischoff: Just a moment, please. We object to that, may it please the Court, as an attempt to get into the defendants' case involving prior art, which was not a part of the direct examination of the witness.

The Court: Overruled.

Mr. Kolisch: Q. You may answer the question.

A. The only shingle I had any knowledge of was the Reynolds shingle. I knew of no other shingle on the market.

Q. Before your patent application was filed—by that I mean your original patent application—which was made in 1947 by Mr. Birkenbeuel—did you read that application over? [109]

A. I did.

Q. Did you look at the drawings? A. Yes.

Q. Did you sign an oath? A. Yes.

Q. Do you know what that oath said?

A. It stated that the drawing was as I had intended it.

Q. When did you realize that the drawing was not as you intended it?

A. At that particular time the drawing had—I had my other two types of locking devices, as you will notice here, your Honor.

Q. You stated that the drawing which was included in the original application filed in 1947 was

(Testimony of Louis J. Korter.)

not what you had told Mr. Birkenbeuel to include; is that correct?

A. The drawing I had given to Mr. Birkenbeuel was this drawing.

Q. You got exactly what you told Mr. Birkenbeuel; is that correct?

A. And I had instructed Mr. Birkenbeuel to put this S-lock in the application. When it came back it had this other type of lock on it. I made both shingles, both types of shingles, with these locks. It was later that I filed a new application and included the S-type lock.

Q. Didn't you try to include the S-type lock in the original [110] application?

A. I wanted it that way, and I don't know why it was never included.

Q. You didn't notice, I take it, when you first looked over the application that it was different?

A. I noticed it, and I asked Mr. Birkenbeuel about it, but for some reason or other I don't know why it wasn't included.

Q. Do you know that Mr. Birkenbeuel later tried to include it in the application?

A. I instructed him to include that S-type lock in the new application.

Q. What happened when you tried to include it in the old application?

A. I don't know.

Q. Don't you know that you did try to submit it and it was rejected by the Patent Office?

A. I don't know.

Mr. Bischoff: That is objected to, may it please

(Testimony of Louis J. Korter.)

the Court. The record is in evidence and speaks for itself.

Mr. Kolisch: Your Honor, the witness on direct went into detail concerning the file wrapper and was examined on it. Now if they are going into that on direct I think we are entitled to go into it on cross.

The Court: Cross examine.

Mr. Kolisch: Q. Do you or do you not know whether [111] Mr. Birkenbeuel in the original application which was filed in 1947 tried to submit an S-lock to the Patent Office?

A. I don't know.

Q. Did you ever instruct him to?

A. At the time I handed him this drawing I pointed to this S-lock and instructed him to do so. He in turn had this copy made, and why it was never included I don't know.

Q. Did you ever tell Mr. Birkenbeuel to include your idea of a drain slot in the old application?

A. We had the drain opening at the end in the first application, and I thought that was adequate. However, as I explained before, under certain conditions where the dust and particles mixed with moisture would clog up those drain openings, I incorporated this new improved protected drain slot on the underside of the gutter.

Q. Did you tell him to put that in your old application or to file a new application?

A. I told him to incorporate the drain slot in

(Testimony of Louis J. Korter.)

combination with the other elements of our first application and include that S-type lock with it.

Q. Had the Patent Office at that time finally rejected your original application?

Mr. Bischoff: Objected to, may it please the Court, on the ground that the record is in evidence and speaks for itself. [112]

The Court: I am of the opinion that you did examine on this same question about the record, and so I will permit cross examination.

Mr. Kolisch: You may answer.

A. I don't know about that particular question you have reference to.

Q. Do you or do you not know whether your original application was finally rejected by the Patent Office?

A. I don't know anything about that. I had nothing to do with that particular part of the business. My attorneys were handling that.

Q. Do you know whether or not you started an action in the District Court for the District of Columbia against the Commissioner of Patents to have a patent issued to you?

A. Again I will have to state that my attorneys were handling that procedure.

Q. You never authorized, as far as you can recall, the filing of such a complaint?

A. I left that entirely to my attorneys.

Q. Are the drain slots 21 shown in your patent necessary to accomplish the result which your pat-

(Testimony of Louis J. Korter.)

ent teaches? Do you have a copy of your patent before you? A. Yes.

Q. If there were no drain slots such as 21, would a shingle function the same as your shingle?

A. As I explained in the early conversation, we had openings [113] on the ends to act as drain slots, but they were not adequate in all operations. That is why I included this new improved drain slot to take care of all conditions.

Q. Is your answer No or Yes?

A. In what respect?

Q. I asked you whether or not a shingle that did not have those drain slots 21 would function the same as yours.

A. It would function on most occasions, yes.

Q. Do you recall when I took your deposition and I asked you the same question what your answer was?

Mr. Bischoff: We object to that, may it please the Court. The question should be read to the witness.

The Court: Yes, that is correct.

Mr. Kolisch: I will read the question. Will you hand the witness Plaintiff's Exhibit 41.

Q. Will you turn to Page 23, Mr. Korter.

"Q. These drain slots, I believe, are referred to as element 21 in your patent (presenting patent to witness). Are they necessary to the results claimed by you in your patent? "A. Yes.

"Q. If there were no drain slots such as 21 in the shingle, it would not function the same way as

(Testimony of Louis J. Korter.)

your patented shingle? “A. No.” [114]

That was the question that I had asked you previously, and you indicated a different answer. Do you want to change your answer, Mr. Korter?

A. No, I do not. I answered—the question was if there were no drain slots such as 21 in the shingle it would not function the same way as your patented shingle, and I said Yes, it would function if you made provision for the opening. This answer says No. “If there were no drain slots such as 21 in the shingle, it would not function the same way as your patented shingle?” And I said, “No.”

Q. Meaning that it would not function in the same way?

A. Unless—wait a minute. That is right. The answer is No. It would have the equivalent, however, in the openings at the end of the shingle. That is what I had reference to. It would not function one hundred per cent on every occasion like my shingle, but it would function in most cases, but not one hundred per cent.

Q. Does the accused shingle have drain slots like 21?

A. It doesn't have the drain slots like 21, but it has the equivalent with those openings on the end.

Q. But it does not have drain slots like 21?

A. The drain slot that I have on the underneath side of the gutter, it doesn't have that. But it does have the equivalent.

Q. Are you familiar with or were you familiar with in 1948 any type of roofing material such as

(Testimony of Louis J. Korter.)

that put out by the [115] Kaiser Company, Kaiser siding, which had drain slots in it?

A. No, I was not.

Q. You had never heard of any material that had drain slots or a provision for permitting water to drain from it as early as 1948?

A. I didn't have any recollection of that.

Mr. Kolisch: That is all.

Mr. Brown: That is all, Mr. Korter.

(Witness excused.)

Mr. Bischoff: Your Honor, the plaintiff rests.

The Court: Now, with the plaintiff resting, you may exercise your option of going ahead at the present time or waiting until Tuesday.

Mr. Kolisch: The defendants would prefer to wait until Tuesday, your Honor.

(Thereupon an adjournment was taken until

Tuesday, March 30, 1954, at 10:00 a.m.) [116]

Portland, Oregon, March 30, 1954, Court reconvened, pursuant to adjournment, and proceedings herein were resumed as follows:

The Court: You may proceed, Counsel.

Mr. Kolisch: On behalf of defendants we offer the following exhibits in evidence:

Defendants' Exhibit 25, a sample of shingles made according to the Crawford Patent No. 553,514.

Mr. Bischoff: We object to it, may it please the Court, on the ground there is no proof that it is a shingle made in exact accordance with the Crawford patent. It is immaterial, irrelevant and incompetent and does not tend to prove anticipation in this case.

The Court: Overruled.

(The sample of shingle above referred to was thereupon received in evidence as Defendants' Exhibit 25.)

Mr. Kolisch: As Defendants' Exhibit 26 samples of shingles made according to Miller Patent No. 2,243,256.

Mr. Bischoff: Your Honor, we make the same objection to this exhibit as to the last one.

The Court: Objection overruled. That goes to its weight and not to its competency.

(The samples of shingles above referred to were [117] thereupon received in evidence as Defendants' Exhibit 26.)

Mr. Kolisch: As Defendants' Exhibit No. 27 a shingle made by the Langville Manufacturing Company in May of 1949.

Mr. Bischoff: Your Honor, that is objected to on the grounds urged as to the last two exhibits, and on the additional ground that this shingle was not referred to in the pleadings nor by notice as required by Section 282 of the Patent Code, which requires that the defendant asserting invalidity should furnish the names and addresses of all persons involved in the prior art at least 30 days before the trial. We have had no such notice. This shingle that is now tendered was never referred to in any pleading or in any notice or any description.

May I ask your Honor's indulgence while I read to your Honor the portion of Section 282 that I refer to?

The Court: You don't need to. I know it as well as you do.

Mr. Kolisch: This shingle is not offered for the purposes Mr. Bischoff states. The shingle is offered as being manufactured in May of 1949. As your Honor knows, it is a one-year prior public use or manufacture which is a statutory bar. This is after the year. It is merely to show what the Langville Manufacturing Company was doing. Mr. Langville, who made this shingle, will appear as a witness and testify. [118]

Mr. Bischoff: Your Honor, we should have been advised that such contention would be made in this case in the manner contemplated by the Patent Code.

The Court: Is this in the pre-trial order?

Mr. Kolisch: Yes.

Mr. Bischoff: It was referred to in the pre-trial order, and we made our objection at that time. It has not been introduced into the record in the manner required by the Patent Code.

The Court: All right. I will not receive it for the purpose which the Code section announces, but I will permit its introduction on the ground that Counsel suggests.

(The shingle last above referred to was thereupon received in evidence as Defendants' Exhibit 27.)

Mr. Kolisch: As Defendants' Exhibit 28 we offer certified copy of the file wrapper of the abandoned Korter application, No. 776,332. I believe that may have been introduced earlier by the plaintiff.

The Court: The number was changed on that to Plaintiff's Exhibit 18, and it was so admitted and the pre-trial order was so amended by the Court to conform to that.

(The file wrapper pertaining to abandoned application of Louis J. Korter, No. 776,332, was thereupon received in evidence as [119] Defendants' Exhibit 28.)

Mr. Kolisch: As Defendants' Exhibit 29, certified copy of the file wrapper of Korter Patent No. 2,631,552.

Mr. Bischoff: No objection.

The Court: Admitted.

(The file wrapper above referred to was thereupon received in evidence as Defendants' Exhibit 29.)

Mr. Kolisch: As Defendants' Exhibit 30, copy of Crawford Patent No. 553,514.

Mr. Bischoff: That is objected to as immaterial and irrelevant, on the ground it does not tend to prove anticipation.

The Court: Overruled. Received.

(Copy of Crawford Patent No. 553,514 was thereupon received in evidence as Defendants' Exhibit 30.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 31, copy of the Miller Patent No. 2,243,256.

Mr. Bischoff: Same objection, your Honor.

The Court: Same ruling.

(Copy of Miller Patent No. 2,243,256 was thereupon received in evidence as Defendants' Exhibit 31.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 32, copy of Lewando [120] Patent No. 124,963.

Mr. Bischoff: Same objection.

The Court: Same ruling.

(Copy of Lewando Patent No. 124,963 was thereupon received in evidence as Defendants' Exhibit 32.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 33, copy of Lewando Patent No. 140,928.

Mr. Bischoff: We make the same objection, your Honor.

The Court: Same ruling.

(Copy of Lewando Patent No. 140,928 was thereupon received in evidence as Defendants' Exhibit 33.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 34, copy of Clawson Patent No. 1,026,202.

Mr. Bischoff: Same objection.

The Court: Same ruling. Admitted.

(Copy of Clawson Patent No. 1,026,202 was thereupon received in evidence as Defendants' Exhibit 34.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 35, copy of Slaughter Patent No. 220,181.

Mr. Bischoff: Same objection.

The Court: Same ruling. Admitted.

(Copy of Slaughter Patent No. 220,181 was thereupon received in evidence as Defendants' Exhibit 35.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 36, copy of Cusack Patent No. 303,921.

Mr. Bischoff: Same objection.

The Court: Same ruling. Admitted.

(Copy of Cusack Patent No. 303,921 was thereupon received in evidence as Defendants' Exhibit 36.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 37, copy of Belding Patent No. 1,971,517.

Mr. Bischoff: Same objection.

The Court: Same ruling. Admitted.

(Copy of Belding Patent No. 1,971,517 was thereupon received in evidence as Defendants' Exhibit 37.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 38, copy of the de Sincay British Patent No. 399, of 1869.

Mr. Bischoff: Same objection.

The Court: Same ruling. Admitted.

(Photostatic copy of de Sincay British Patent No. 399 was thereupon received in evidence as Defendants' Exhibit 38.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 39, copy of Langville Design Patent No. 166,761. [122]

Mr. Bischoff: We make the same objection, with

the added objection that this patent was not pleaded in the complaint and was not referred to as required by the provisions of Section 282 of the Patent Code.

Mr. Kolisch: It is not being referred to as a statutory bar, your Honor. It is merely to show the state of the art, what the defendant was doing.

Mr. Bischoff: I want to add the further ground that this is not a mechanical patent. It is a design patent, purely, showing a picture merely. It is not relevant to the question of patentability or any other issue involved in this case.

Mr. Kolisch: The design patent, your Honor, is relevant to show on the question of infringement what the defendant was doing. It is part of the defense, of course, that the defendant was not a copyist; that he had designed his own shingle and was manufacturing according to his own patents and on his own design. We are merely putting in a design patent which the defendants obtained on their shingle.

Mr. Bischoff: Your Honor, the Patent Code requires notice and pleading of patents in all phases, including those patents to prove the state of the art as well as validity or invalidity. That is the express language of the statute. It has not been done.

The Court: I will reject it for the present. I will reserve the question, though. [123]

Mr. Kolisch: As Defendants' Exhibit 40, copy of the Pruden Patent No. 1,406,757.

Mr. Bischoff: That is objected to as immaterial

and irrelevant, and does not prove or tend to prove anticipation.

The Court: Overruled. Admitted.

(Copy of Pruden Patent No. 1,406,757 was thereupon received in evidence as Defendants' Exhibit 40.)

[See Book of Exhibits.]

Mr. Kolisch: As Defendants' Exhibit 41, the deposition of L. J. Korter, taken on September 9th, 1953.

The Court: Admitted.

(The deposition of L. J. Korter was thereupon received in evidence as Defendants' Exhibit 41.)

Mr. Kolisch: As Defendants' Exhibit 42, sample of a shingle made according to the abandoned Korter application, No. 776,332.

Mr. Bischoff: May I see that a moment, please. No objection, your Honor.

The Court: Admitted.

(The sample of shingle referred to was thereupon received in evidence as Defendants' Exhibit 42.)

Mr. Bischoff: I want to correct that, your Honor. We have no objection to the shingle going in. We object to the [124] designation given to it by Counsel as the abandoned shingle. By our failing to object we don't want it to be assumed that we agree this was an abandoned shingle.

The Court: I never assume, Mr. Bischoff, that you agree with anything opposing counsel says.

Mr. Kolisch: As Defendants' Exhibit 43, a sample of two felt pads.

Mr. Bischoff: No objection.

The Court: Admitted.

(The felt pads referred to were thereupon received in evidence as Defendants' Exhibit 43.)

Mr. Kolisch: As Defendants' Exhibit 44, the claim of the Korter Patent broken down into elements.

Mr. Bischoff: No objection.

The Court: Admitted.

(The document referred to, entitled "The Claim of Korter 2,631,552," was thereupon received in evidence as Defendants' Exhibit 44.)

The Court: The Court admits all the exhibits that were mentioned, if I did not do it specifically, with the exception of one which I rejected, which I think was No. 39.

Mr. Kolisch: Yes.

The Court: All right. [125]

Mr. Kolisch: Call Mr. Langville.

VICTOR H. LANGVILLE

one of the Defendants herein, was produced as a witness in behalf of Defendants and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Kolisch:

Q. Will you please state your name, address and occupation.

(Testimony of Victor H. Langville.)

A. Victor H. Langville, 445 Ellis Avenue, Beaverton, Oregon. I am owner of the Langville Manufacturing Company.

Q. Are you one of the defendants in this case, Mr. Langville? A. Yes.

Q. What is your training and technical background in the business which you are pursuing, Mr. Langville?

A. My experience started approximately in 1906, when I entered apprenticeship with a very large manufacturing concern in Sweden. Six years was spent to learn the trade and to go through the different departments. At the age of 19 my parents and I immigrated to the United States. In the summer of 1914 I arrived in Chicago and enrolled at Lane Technical High School nights. I obtained employment with the Alemite Metals Company. In the next two years I learned the language and something along the line of mechanical engineering. In 1916 I arrived on the Pacific Coast, in Seattle, and obtained employment with the Skinner Shipbuilding Corporation. I worked myself up to [126] foreman. A few months later I was inducted into the Army. During the time I was in the Army I did some valuable work for the United States Government. After the Armistice I moved to Spokane, Washington, where I organized the Spokane Tool & Die Works. I was head of that concern until 1935. I was doing a large amount of work for the Department of Agriculture in the Forest Service in the eradication of blister rust in Montana and

(Testimony of Victor H. Langville.)

Idaho. I learned something about aerial photography. After selling out and coming down to Portland, Oregon, I connected with the Westinghouse Electric, where I developed some of these ideas.

In 1938 I organized the Langville Manufacturing Company, with the help of Charles E. McCulloch, of Hart, Spencer & McCulloch. I developed my instruments, and when the World War started my orders started coming from the English Government, and when we started in the war I had standing orders from the United States Government for the instruments. In addition to that, I had Army orders, Maritime and Navy orders. I had some 90 men working in the actual plant, and subcontractors.

In 1948, between Christmas and New Year's, two men came to my office from the Builders Supply Company. They brought a crude model of a metal shingle and asked me if I would make the dies for it.

Q. Was that your first introduction to aluminum shingles? [127] A. Right.

Q. In 1948? A. That is correct.

Q. What happened then?

A. I asked these men if they had tried to obtain a patent. They told me they had been to a patent attorney.

Mr. Bischoff: I object to that, may it please the Court. Conversations with third parties whose identity is not known is not binding upon the plaintiff in this case.

(Testimony of Victor H. Langville.)

The Court: Objection sustained.

Mr. Kolisch: Q. With whom did you have conversations in 1948?

A. Well, after seeing this shingle I consulted with some old-time sheetmetal men and roofing contractors. They told me at the time——

The Court: Never mind.

Mr. Kolisch: Q. With whom did you have conversations? A. Roofing contractors.

Q. Do you remember their names?

A. Old-time sheetmetal men. Martin Jonasen and Al Losli. I also mentioned it to Mr. Roy Wetle.

Q. All right. Was your company retained to manufacture any aluminum shingles in 1948?

A. In the early part of 1949, right after the first of the year, I made a layout of the dies of this particular shingle—— [128]

Mr. Bischoff: Your Honor, at this time we interpose an objection to any evidence by this witness pertaining to the manufacture of anything pertaining to the prior art on the ground that the pleadings and the notice required by Section 282 of the Code did not name this witness as one engaged in either the use, manufacture or sale of those shingles prior to the plaintiff.

Mr. Kolisch: The defendant is testifying now subsequent to January of 1949. He is in the beginning of 1949. Any use subsequent to January 9th, 1949, is not a statutory bar to the plaintiff's patent.

Mr. Bischoff: We object to that with respect to any date, because the Code requires that anyone

(Testimony of Victor H. Langville.)

who is to testify regarding the use, manufacture or sale as a part of the prior art must be named and the address given and all the other requirements.

Mr. Kolisch: My understanding, your Honor, of that section is that only in the case of anticipation must there be given the 30-day notice. In the case of the state of the prior art information concerning it may be introduced at any time with no notice.

Mr. Bischoff: Will your Honor permit me to read the pertinent portions of the section?

The Court: No, don't read the statute. Have you any authority on it? [129]

Mr. Bischoff: No, your Honor. Our authority is the statute.

The Court: After all, the statute has been in existence for a great many years.

Mr. Bischoff: Oh, no, your Honor. This is the new Patent Code that became effective on January 1 of this year.

The Court: It is the same section that has been in there.

Mr. Kolisch: It is substantially the same section that has always existed.

Mr. Bischoff: It is not the same section. There are important changes in it.

The Court: I have read it, and I don't think that they are very important changes. Is there no interpretation of this section?

Mr. Bischoff: I have found no interpretation of

(Testimony of Victor H. Langville.)

the new section. If your Honor will permit me to read it to your Honor, I think to clarify it—it is only a brief portion of the section. I think it will make it clear.

The Court: I will hear from the other side, then. They are the proponents of the evidence, so I will hear them.

Mr. Kolisch: It was clear under the old statute, your Honor, as your Honor recalls, that you can introduce evidence concerning the state of the prior art at any time. It was not required to give one month's notice. [130]

The Court: Yes, that is true.

Mr. Kolisch: Under the new statute, Section 282, the note which appears does not suggest that there has been any change in the interpretation that has always been placed on this section. I am familiar with no cases under the new Act which have changed the meaning of this section.

The Court: What does the note say?

Mr. Kolisch: The note reads as follows—it is derived from Title 35, U.S.C., 1946, and then some statutory numbers are given.

“The first paragraph declares the existing presumption of validity of patents.

“The five defenses named in R.S. 4920 are omitted and replaced by a broader paragraph specifying defenses in general terms.

“The third paragraph, relating to notice of prior patents, publications and uses, is based on part of

(Testimony of Victor H. Langville.)
the last paragraph of R.S. 4920 which was superseded by the Federal Rules of Civil Procedure but which is reinstated with modifications.”

As passed by the House, Item 1 reads: “Non-infringement or absence of liability for infringement,” which was amended by the Senate. Then there follows a restatement of R.S. 4920. [131]

I submit, your Honor, there has been no change in the law.

Mr. Bischoff: Your Honor, the portion of the section involved, 282—I made an error when I stated that the effective date was January 1 of this year. It was January 1, 1953. It reads:

“In actions involving the validity or infringement of a patent the party asserting invalidity or noninfringement shall give notice in the pleadings or otherwise in writing to the adverse party at least 30 days before the trial, of the country, number, date, and name of the patentee of any patent, the title, date and page numbers of any publication to be relied upon as anticipation of the patent in suit or, except in actions in the United States Court of Claims, as showing the state of the art, and the name and address of any person who may be relied upon as the prior inventor or as having prior knowledge of or as having previously used or offered for sale the invention of the patent in suit. In the absence of such notice proof of the said matters may not be made at the trial except on such terms as the Court requires.”

Now, we submit that, as the Reviser's note states,

(Testimony of Victor H. Langville.)

this paragraph, while originally intended to be superseded or [132] was thought to be superseded by the Federal Rules of Civil Procedure, says "but which was reinstated with modifications." There were changes made or modifications made in the statute in addition to the requirements of the Federal Rules of Civil Procedure.

Mr. Kolisch: May it please the Court, the operative words, as Mr. Bischoff read, are "or as having prior knowledge of or as having previously used or offered for sale the invention of the patent in suit."

We are not offering this information and these exhibits as anticipating the invention. We are showing the state of the prior art. If you try to anticipate the invention, then you must give 30 days' notice. We are not offering this as anticipation.

The Court: What does the section say about prior art? What is the clause about prior art?

Mr. Kolisch: "In actions involving the validity or infringement of a patent the party asserting invalidity or noninfringement shall give notice in the pleadings or otherwise in writing to the adverse party at least 30 days before the trial, of the country, number, date, and name of the patentee of any patent, the title, date and page numbers of any publication to be relied upon as anticipation of the patent in suit or, except in actions in the United States Court of Claims, as showing the state of the art, and the [133] name and address of any person who may be relied upon as the prior inventor or as having prior knowledge of or as having previously

(Testimony of Victor H. Langville.)

used or offered for sale the invention of the patent in suit."

It is prior art as to the invention; not as to the state of the prior art.

The Court: I don't know about that. I hadn't taken in the full force of that before. That suggestion about prior art, it seems to me, might be given a different interpretation.

Mr. Bischoff: Your Honor, may I be permitted to make one brief observation? We are particularly insisting upon this objection because from the very inception of this case we have been insisting upon obtaining information of those who were to testify concerning the prior art. Extensive argument was made on the subject before Judge McCulloch when the motions were heard, and I called it to the attention of the Court at the time the matter came up here for setting of the case for trial. Subsequent to that Counsel complied with that request to the extent of sending us a written notice of one person who would be relied upon for testimony as to prior art, and that was a man named Nabb, who was named in the pre-trial order, and that information was given to us in the form of a letter and the substance of it was inserted in the pre-trial order. So at no time were we led to believe [134] that this witness would be used to give evidence upon any phase of the prior art or as to any patents or any anticipation, and we are not in a position to meet his testimony upon that phase of the case.

Mr. Kolisch: We are not required to furnish

(Testimony of Victor H. Langville.)

them with information as to who is going to testify concerning prior art patents. There is no requirement in the statute concerning that. It is only if I am going to offer a witness who has himself prior knowledge that goes more than one year back of anticipation. Then I must give them the 30 days' notice. Mr. Langville is about to testify concerning shingles which he developed in his own plant, and the shingle which we are now presenting is not a statutory bar.

The Court: Why didn't you tell them about it?

Mr. Kolisch: I am under no requirement to tell them about it.

The Court: All right. Why didn't you tell them? Do you want to try these cases with Aces up your sleeve?

Mr. Kolisch: Not at all, your Honor.

The Court: I am going to impose terms on you now, irrespective of the statute, in view of the situation. What terms do you want imposed?

Mr. Bischoff: Your Honor, we would of necessity have to request that we be given an opportunity to meet any evidence that is developed which we are not prepared to meet [135] at this time.

The Court: All right.

Mr. Bischoff: And investigate matters pertaining to the use, manufacture or development of a shingle which is to be deemed a consideration in connection with the prior art. We will want a continuance for the purpose of supplying and accumulating such additional information and to make the

(Testimony of Victor H. Langville.)

evidence available. Had we known that he would be used for this purpose, we would have taken his deposition to obtain disclosure and discovery and as to the factual matters involved in that sort of testimony.

The Court: All right. How much time do you want?

Mr. Bischoff: Your Honor, I can't say at this time until we know what his evidence is going to be. When he has concluded his evidence, I could better say what we will need in that connection to supply the additional information.

The Court: I want to be fair to the other side. Do you want to go ahead now under this situation?

Mr. Kolisch: Yes, your Honor.

The Court: Even though I give them time to answer?

Mr. Kolisch: Yes, certainly.

The Court: All right.

Mr. Kolisch: And I may say on this matter, your Honor, you feel that perhaps I have held back. I didn't know any more who their expert was going to be than they knew that [136] this man was going to appear. I didn't know Mr. Richardson was going to come and testify. I have never heard of a patent case where there was any obligation on one side to disclose to the other side what each person is going to testify to—and particularly where this man is a defendant. They took the deposition of one defendant.

The Court: Mr. Richardson is in an entirely

(Testimony of Victor H. Langville.)

different situation. I think they have a point about it. I think it should have been disclosed. Since it has not been, I will go ahead with the trial until such time as Mr. Bischoff says that he is embarrassed, and then I will grant a continuance.

Proceed.

(Short recess.)

The Court: You may proceed.

Mr. Kolisch: Q. Mr. Langville, I show you Defendants' Exhibit 27, and ask you if you can identify it.

A. This is a shingle made by our concern.

Q. Do you know about when you made that shingle?

Mr. Bischoff: Your Honor, may it be stated for the record that our objection goes to this line of examination in so far as it is an attempt to establish prior art, use, sale or manufacture, and will go to all of this line of examination without the necessity of repeating the objection?

The Court: I had understood that I had already taken [137] care of that situation. I said that I would impose terms and give you an opportunity to meet whatever is put in on that line.

Mr. Bischoff: Very well.

The Court: And grant a continuance of the case. Go ahead.

Mr. Kolisch: Q. When did you make that shingle, Mr. Langville?

A. This shingle was made in the spring of 1949.

(Testimony of Victor H. Langville.)

Q. Does that shingle have a drain hole in the gutter? A. Yes, it has.

Q. Is that the shingle that you engineered?

A. Yes.

Q. Did you ever apply for a patent on that shingle?

A. My son applied for a design patent in 1950. It was granted in 1952.

Mr. Kolisch: Your Honor, I now renew my offer of Defendants' Exhibit 39, which is the design patent of the Langville shingle.

Mr. Bischoff: Objected to as immaterial, irrelevant and incompetent; not a mechanical patent; and it has no bearing on the question of the prior art involved in this shingle before the Court.

The Court: Overruled. I will be able to segregate those things in my mind, I am sure. [138]

(The design patent, No. 166,761, was thereupon received in evidence as Defendants' Exhibit 39.)

Mr. Kolisch: Q. Did you ever apply for a mechanical patent on that shingle, Defendants' Exhibit 27? A. No, sir.

Q. Why didn't you apply for a mechanical patent?

Mr. Bischoff: Objected to as immaterial.

The Court: Objection sustained.

Mr. Kolisch: Q. Will you take Plaintiff's Exhibit 3, which is the accused shingle, and compare it with Defendants' Exhibit 27. Will you please

(Testimony of Victor H. Langville.)

compare whatever similarities or dissimilarities you see between those two shingles.

A. Where they are similar?

Q. What similarities or dissimilarities do you see between those shingles?

A. Or dissimilarities. Well, this particular shingle, which is Exhibit 27——

Q. Is that the one with the slot?

A. Yes.

Q. That is Plaintiff's Exhibit 27.

A. It has a drain hole at the left-hand lower corner.

Mr. Bischoff: Your Honor, may I ask the witness to talk a trifle louder so I can hear him?

The Court: Yes; speak up. [139]

The Witness: And Exhibit No. 3——

Mr. Kolisch: Q. That is Plaintiff's Exhibit 3. That is the accused shingle.

A. Yes. Exhibit 3 has an overturned edge on the left-hand lock which forms a trough.

Q. Does Plaintiff's Exhibit 3 have a drain slot like that shown in Defendants' Exhibit 27?

A. Would you repeat that question?

Q. Does Plaintiff's Exhibit 3 have a drain slot like that shown in the Defendants' Exhibit 27?

A. No, it hasn't.

Q. Are those two shingles substantially the same with the exception of the locking flange which you referred to in the upper left corner and the drain slot?

A. I would say that they are.

Q. What did you say?

(Testimony of Victor H. Langville.)

A. I say they are.

Q. I see. Now, when did you make up the first shingles like the accused shingle, Plaintiff's Exhibit 3?

A. The first shingles came off the press in 1953, in April.

Q. Prior to that time did you make any other shingles which were similar to Defendants' Exhibit 27 or Plaintiff's Exhibit 3?

A. Yes. The shingles produced before that didn't have this overturned edge in the left-hand corner.

Q. Did they have a drain slot?

A. No, sir.

Q. Why did you eliminate the drain slot?

A. Well, after we put the first shingles to a test we found that the drain slot didn't serve any particular purpose in our opinion.

Q. Have you manufactured aluminum shingles for others besides the Perma-Lox Company?

Mr. Bischoff: Objected to as immaterial.

The Court: What is the purpose of the question?

Mr. Kolisch: The purpose of the question, your Honor, as will be developed, is that the witness has manufactured other shingles in which there is no provision for drain slots and drainage of condensation which was stressed in Plaintiff's case.

The Court: All right. Proceed.

Mr. Kolisch: Q. Have you manufactured aluminum shingles for others besides Perma-Lox?

A. Yes, I have.

(Testimony of Victor H. Langville.)

Q. Who are some of the other people for whom you have manufactured aluminum shingles?

A. In the early part of 1949 I made them for the American Aluminum Shingle Corporation.

Mr. Bischoff: Your Honor, I can't hear the witness.

Mr. Kolisch: You will have to speak a little louder, [141] Mr. Langville.

A. I made them for the American Aluminum Shingle Corporation in 1949, and we made shingles for the Bartlett Shingle Company, which have been produced for approximately three or three and a half years.

Q. Did you ever make any shingles for any others that you recall now?

A. We made a Polsky shingle.

Q. With reference to the Bartlett shingles, do those shingles have any provision for drainage or drain holes on the back?

A. No, there is no drain hole or drain opening in it. If we are talking about drainage, every shingle has a natural drainage where they are locked together.

Mr. Bischoff: We object to that, may it please the Court, and move to strike the answer, as to what every shingle has. We have no shingles here or any information about them from which he can testify.

The Court: Overruled.

Mr. Kolisch: Q. For how long have you manufactured the Bartlett-type shingle?

(Testimony of Victor H. Langville.)

A. Somewhat over three years, approximately three and a half years.

Q. Have you had any complaints or difficulty from users of that shingle?

A. No, sir. [142]

Q. Are you familiar with any of the regulations of The Federal Housing Authority, the FHA, concerning the requirements of drainage or drain slots on the back of shingles?

Mr. Bischoff: Objected to as immaterial, if the Court please.

The Court: Objection sustained.

Mr. Kolisch: Q. From your experience do you think it is necessary to provide drain slots or drainage on shingles?

A. Through our experiments we found that the drain slots and drain holes do not serve any particular purpose, because every shingle has a natural drain slot where they are put together in the corners.

Q. Do you consider condensation to be a problem which has to be taken care of in the construction of aluminum shingles?

Mr. Bischoff: I object to that as immaterial, his belief or opinion about that problem.

The Court: Is he testifying as an expert?

Mr. Kolisch: This witness has had considerable experience as far as the construction of shingles is concerned and the use. He can testify as an expert.

The Court: All right. If this is offered as expert testimony, I admit it.

(Testimony of Victor H. Langville.)

Mr. Kolisch: Q. Do you consider condensation to be a problem which must be taken care of in aluminum shingles?

A. When a roof is properly insulated and with proper air [143] conditioning I believe, in my opinion, that condensation is a very minor issue.

Q. Now, in the case of the accused shingle, Plaintiff's Exhibit 3, if there should be any condensation on the back of the shingle, how is it taken care of?

A. Well, every shingle or every roof, I should say, with shingles on it, metal shingles, or even composition shingles, if any water should come from the outside and get in there it will find the lowest point in the natural drainage. It has been that way for many, many years.

Q. On what particular portion of the accused shingles would any such water, if there is any, drain?

A. Where they are joined together.

Q. And would that water find its way to the face of a succeeding lower shingle?

A. It naturally would have to.

Q. Now, in the case of the accused shingle I note that the corners are open. In your experience has there been any clogging of these corners with dirt or other foreign matter?

A. I have never seen any clogging. I imagine there has been some.

Q. Do you know whether or not there has been

(Testimony of Victor H. Langville.)

any patent or patent application filed on the accused shingle, a structure patent?

Mr. Bischoff: Objected to as immaterial. [144]

The Court: Everybody know there has not been, don't they?

Mr. Bischoff: I beg your Honor's pardon?

The Court: Doesn't everyone know there has not been?

Mr. Kolisch: No, your Honor. It is our position there has been an application filed on the accused shingle.

The Court: What difference does that make?

Mr. Kolisch: To show that he is not a copyist. He developed his own shingle.

Mr. Bischoff: That doesn't prove it.

The Court: It is absolutely immaterial. Stricken.

Mr. Kolisch: Q. Will you take Defendants' Exhibit 25. Can you identify Defendant's Exhibit 25?

A. These are patterns that one of our die-makers made from the Crawford patent of 1896.

Q. Were those shingles made up under your supervision? A. Yes, more or less.

Q. Will you compare Defendants' Exhibit 25 with the patented shingle, Plaintiff's Exhibit 2. Please state what you find that is similar or dissimilar between those two shingles.

A. Well, the Crawford has a nailing tab which the patented shingle has, and it has got reversely turned edges. The Crawford shingle has auxiliary tabs which can be used as a lock, which the patented shingle hasn't got.

(Testimony of Victor H. Langville.)

Q. Does the Crawford shingle have a gutter?

A. Yes, it has.

Q. Is there any provision for drainage in the Crawford shingle?

A. Wherever the shingles are locked together you can't get a perfectly tight joint, and naturally there would be some drainage.

Mr. Bischoff: A little louder.

A. There would be some drainage coming out between the shingles. That is natural.

Mr. Kolisch: Q. Are there any other points that you want to bring out concerning these two shingles?

A. I notice on the patented shingle it has impressions in the upper and the lower overturned edges, and it also has a drain slot at the left-hand lower edge.

Q. The Crawford shingle, I take it, then, does not have indentations such as shown in the face of the shingle in the patent?

A. The design shows in the patented shingle, where this one is blank. It has no design.

Mr. Kolisch: Your Honor, we would like to have the witness perform a demonstration similar to that performed by Mr. Richardson, by assembling the Crawford shingles and subjecting them to the water test.

Q. Will you please assemble the Crawford shingles such as they would be assembled on a roof and perform your experiment. [146]

Mr. Bischoff: May it please the Court, we shall

(Testimony of Victor H. Langville.)

object to the demonstration to be performed upon the Crawford shingle on the ground that an assembly of shingles as they are assembled here in court does not reflect the true assembly of the shingle as described in the patent. The Crawford patent requires in the application of that shingle to a roof that the edges be flattened down. To read from the specifications:

“Underneath is turned up, as shown in Fig. 1, in this way firmly securing the shingles together at the corners. All the folded edges fastened together are hammered down, so as to be substantially flat and perfectly waterproof.”

Now that is the way in which a true demonstration would demonstrate the operation of the Crawford shingle, and not the loose assembly as it is made here in court.

The Court: You may proceed.

Mr. Kolisch: Q. Mr. Langville, have you assembled a section of Crawford shingles such as they would be assembled on a roof?

A. Will you please state that again?

Q. Have you assembled a section of Crawford shingles such as might typically be assembled on a roof?

A. Well, I imagine that the shingles would be assembled like this except for this turned-up edge, which serves as a lock. [147]

Mr. Kolisch: Turn up the edge, then. Now, are you ready to proceed, Mr. Langville?

A. Yes.

(Testimony of Victor H. Langville.)

Q. Will you please apply a spray of water to the back of those shingles and describe what you are doing, and then describe any results which you observed.

Mr. Bischoff: Your Honor, may we have permission to observe the demonstration from the back?

The Court: Yes. Don't interfere with it.

Mr. Kolisch: Q. Will you describe what you are doing, Mr. Langville.

A. I am spraying water on the back of the shingles. Being that we only have a very small section, I can't do like Mr. Richardson, go over a whole section, but I am applying the water as nearly as I possibly can upon the center section.

Q. Would you observe what is happening to the front of the shingle, Mr. Langville? Would you observe what is happening to the front of the shingle?

A. The water is coming out through the lock on both sides.

Q. The water that is being applied to the back of the shingle is draining to the front of a lower adjacent shingle?

A. That is right, through here. Also, it comes through the locks at each side, at each end.

Q. That would be at the corners of the shingle, the openings through the corners of the shingle?

A. Where the next shingle would be joined together.

Q. And any water on the back would be transferred to the front of the lower shingle?

(Testimony of Victor H. Langville.)

A. Yes, sir. This is coming through there. Of course, there is no insulation on the back of it.

Q. You mean you don't have a felt pad or anything like that? A. That is right.

Q. But this is similar to the demonstration which Mr. Richardson performed on the accused and on the patented shingle which you are now performing on the Crawford shingle?

A. Yes, as far as I understand it.

Q. Mr. Langville, I hand you Defendants' Exhibit 26, and ask you if you can identify those shingles.

A. Yes. These are shingles made by our diemaker.

Mr. Bischoff: A little louder, please, Mr. Langville.

A. These are shingles produced by one of our diemakers, which is supposed to represent the Miller patent—taken off of the Miller patent drawing. It is made in miniature form so as to be easy to handle.

Q. Are those shingles of the same size as those suggested in the Miller patent?

A. In the Miller patent they suggest they can be made up to any size. They do recommend something 30 to 50 inches in length. But in using aluminum, with the expansion and contraction that you have in a long piece of aluminum, it is [149] impractical to use anything 50 inches long, because you would get quite a buckle in the center by having the nailing tabs so far apart.

(Testimony of Victor H. Langville.)

Q. Did the Miller patent contemplate the use of aluminum?

A. I am not sure. It could be copper; it could be galvanized iron. That possibly has a lot less of expansion than aluminum.

Q. Will you please compare Defendants' Exhibit 26, which are the Miller shingles, with Plaintiff's Exhibit 2. Plaintiff's 2 is the patented shingle.

A. The patented shingle?

Q. Yes. Do both of those shingles contain reversely turned edges?

A. Yes. The top and the bottom are reversely turned, and so are the upper section and the lower section. They are reversely turned.

Q. Is the Miller patent of the interlocking type shingle? A. Yes, it is.

Q. Now, I call your attention to the drawings, Figures 7 and 8, in the Miller patent, which is Defendants' Exhibit 31. I will ask you what you there see.

A. Well, Figure 6 shows an assembled section of the Miller patented shingles. Figure 7 shows the locking part of the Miller shingle, which as far as I can see is an S-lock which fits apparently perfectly tight and close together.

Q. Would you say that Figure 7 and 8 disclose the S-type [150] lock? A. Yes.

Q. Referring to the patented shingle, what type of lock does that have?

A. Well, it looks to me like they would be identical, or very close so.

(Testimony of Victor H. Langville.)

Q. Refer to Plaintiff's Exhibit 5. While he is getting Plaintiff's Exhibit 5, refer to the accused shingle, Plaintiff's Exhibit 3, and tell me whether or not that shingle has an S-lock like that shown in the patented shingle or the Miller shingle.

A. Well, I wouldn't say so, because that impression is very light, only to turn up so that one would lock into the other.

Q. How would you characterize the type of lock in the accused shingle?

A. Well, just the reversely overturned edges, and in the manufacturing process the edges are just turned over slightly so as to be able to assemble together.

Q. Do those reversely turned edges in the accused shingles form a close or a tight fit?

A. I would say it would be a very loose fit—very loose.

Q. All right. Will you refer to Plaintiff's Exhibit 5, which is the principle of the Korter invention. Will you compare that with the Crawford shingle. Now what similarities do you see between the principle of the Korter invention as [151] set forth in this exhibit and the Crawford shingle.

A. Exhibit No. 5 shows the dripping of water from one shingle onto the top of the other through the gutter. And any type of shingle will naturally do the same thing. It all depends on where the water comes from, if there is any water in the back of it. It doesn't make any difference if it was Crawford's or if it was any other shingle, in my opinion.

(Testimony of Victor H. Langville.)

Q. Does the Crawford shingle have the same principle as shown in Plaintiff's Exhibit No. 5?

A. I would say so.

Q. Will you refer to Defendants' Exhibit 44. You will note that Defendants' Exhibit 44 has the elements of the Korter claim listed numerically.

A. Yes.

Q. Referring to those elements, will you tell me with respect to element 1, "a substantially flat sheet of metal of uniform thickness," does such an element exist in the prior art shingles as you know them?

The Court: I don't think that is a proper question, unless he is talking about any shingles that he knows about.

Mr. Kolisch: Q. Referring to the Crawford shingle, does it have it in the Crawford shingle?

A. I would say that they are substantially the same except, of course, in the design. [152]

Q. It is a substantially flat sheet of metal?

A. That is right.

Q. Referring to element 2, "corrugations in said shingle," are you familiar with Defendants' Exhibit 37, the Belding patent? Are you familiar with that patent?

A. I believe I have seen it once or twice.

Q. Does that patent disclose corrugations?

A. Yes, it has a number of fine and coarse corrugations.

Q. Does it have ridges as called for in element No. 3?

(Testimony of Victor H. Langville.)

A. Yes, it has. It has ridges—about three of them.

Q. Now, referring to element No. 4, “the lateral edges of the shingle being reversely turned,” does the Crawford patent have reversely turned lateral edges? A. Yes, it has.

Q. Referring to element No. 5, “curved outer edge portions for interlocking the shingle with laterally adjacent shingles,” does the Miller patent have that element?

A. Yes, it has. It has reversely turned edges.

Q. Does the Crawford have it also?

A. Yes.

Q. How about elements Nos. 6, 7, 8 and 9, which are further definitions of the construction of these reversely turned edge portions, referring to them as half-round, and reversely turned, and having a gutter?

A. Yes, it seems to me they all have the same—very similar. [153]

Q. How about element No. 10?

A. It also seems to be identical.

Q. With reference to element No. 11, “a fastening tab,” does Crawford have a fastening tab?

A. Yes.

Q. With reference to element No. 12, “a drain slot,” does Crawford or Miller have drain slots?

A. No, there is no drain slot fabricated in the metal.

Q. Is there provision for drainage in both these patents?

(Testimony of Victor H. Langville.)

A. Only natural drainage that they all have.

Q. I call your attention to Defendants' Exhibit 40, which is the Pruden patent. Are you familiar with that patent? A. I have seen it once.

Q. Does that patent show a drain slot or drain hole?

A. Yes, it has. It seems to me this particular section shows in the drawing as two holes.

Q. What are they referred to as in the patent, the element numbers?

A. They are referred to as drain holes.

Q. What is their number? A. No. 17.

Q. Will you point out to the Court where those elements 17 are?

A. Shown at two points here, and also shown in the gutter at [154] two points.

Mr. Kolisch: All right. That will be all. You may cross-examine.

(Thereupon a recess was taken until 2:00 o'clock p.m. of the same day, at which time Court reconvened and proceedings herein were resumed as follows:) [155]

Afternoon Session

VICTOR H. LANGVILLE

a witness produced in behalf of Defendants, resumed the stand and was further examined and testified as follows:

Cross Examination

By Mr. Brown:

Q. Mr. Langville, I believe you said, sir, that

(Testimony of Victor H. Langville.)

you saw two sheetmetal men somewhere between Christmas of 1948 and the following New Year's?

A. That is correct.

Q. Did you say those men's names were Martin and Losli? A. Martin Jonasen and Al Losli.

Q. About that same time, sir, did you see or talk to anybody else in connection with aluminum shingles?

A. Yes, I was talking to Mr. Roy Wetle.

Mr. Bischoff: I didn't hear the name.

A. Roy Wetle, W-e-t-l-e.

Mr. Brown: Q. Is it not a fact, Mr. Langville, that you also talked to a gentleman by the name of Al Myers around that time? A. Al Myers?

Q. Yes, sir.

A. Mr. Myers came into our place of business approximately that time, yes. That is right.

Q. And what did Mr. Myers talk to you about at that time, sir? [156]

A. Mr. Myers didn't talk about hardly anything to me. It was through someone else. Mr. Myers come into our office with another gentleman.

Q. What was his name, please?

A. Fred Polsky.

Q. Did either Mr. Myers or Mr. Polsky bring any aluminum shingles with them?

A. They brought a rough sample of a shingle.

Q. Did you know that Mr. Al Myers was a salesman for Mr. Korter?

A. I didn't know that. I know that the men

(Testimony of Victor H. Langville.)

come in and represented themselves to be from the Builders Supply Company.

Q. Now, these samples that you said Mr. Myers brought to you, what did you do with those?

A. They would possibly be around the plant. They were just a sample made similar to the Crawford patent. It was cut out of one piece of metal and just formed up. They told me that their sample was made by some sheetmetal works in Portland.

Q. Did they tell you the name of the sheetmetal works?

A. No, they didn't. I didn't even ask them about that.

Q. Are you quite certain that that shingle Myers showed you was not a Korter shingle at that time?

A. No, sir; it was not. It was a plain piece of metal without [157] any kind of a design on it. It was a plain piece of metal with the edges turned up and down reversely.

Q. Do you know whether the bottom or lower edges were turned up and down respectively, sir, to form a so-called S-lock in the shingle that Mr. Myers showed you?

A. No, the edges were turned over something like the Crawford patent that I know now. I didn't know at that time.

Q. Did you inquire of Mr. Myers at that time as to whether he was or was not a salesman for Mr. Korter?

A. Sir, I didn't know, and I didn't ask him that question.

(Testimony of Victor H. Langville.)

Q. I believe you testified, sir, that beginning in July, 1952, you made aluminum shingles both with the drain slot and without the slot. Did you make any for him such as that?

A. No, sir; I didn't. In 1949, in the spring, we turned out about 126 shingles with a drain slot in them. We discontinued right after that, because we didn't find any particular purpose in using the slot. Our records will show that, will bear out my statement.

Mr. Brown: Will you kindly hand Mr. Langville Defendants' Exhibit 27, please. I beg your pardon. What I want is Defendants' Exhibit 39.

Q. Does that design patent, Mr. Langville, show the shingle that you were making or had made, as you said, in the spring of 1949?

A. Yes, it is identical. [158]

Q. Will you tell me, sir, as to whether that design patent shows a drain slot in that shingle?

A. Well, the way the lines are in this particular shingle I don't believe it would show if there was one in there. Now this patent was taken out——

Mr. Bischoff: Just a moment. We object to that. It is beyond the scope of the question.

The Witness: Please ask the question again. I didn't quite understand it.

Mr. Brown: Q. Can you explain, sir, why it was that, as you say, you had made a shingle with the drain slot in the spring of 1949 and then your company took out a design patent just a few months later and deliberately left off that drain slot? You

(Testimony of Victor H. Langville.)

had a right, sir, to have shown that drain slot in that design patent, but you didn't. Can you explain that?

The Court: That question is stricken. That is argumentative.

Mr. Brown: Q. Will you explain, sir, as to why you didn't show the drain slot in your patent.

A. This patent was taken out—it was filed on August 25th, 1950. We discontinued after making about 126 samples—we discontinued the slot. If I remember correctly, it was a year later that this application was filed.

Q. I believe you testified when referring to the Miller patent that it had interlocking edges. Did you make that statement, [159] sir?

A. I said it had curved edges, interlocking at the top and the bottom with the curvature.

Q. Does the Miller patent show the so-called S-lock at the top and the bottom of the shingle?

A. The patent shows that.

Q. It does. Will you please look at Figures 4 and 5, elements 5 and 7, of the Miller patent, Defendants' Exhibit 31, and tell me whether or not those elements 5 and 7 constitute a so-called S-lock.

A. Did you say 5 and 7?

Q. Yes, elements 5 and 7.

A. Well, in mechanics we would say an S-lock. It is not a perfect S the way I would write the letter S, but in mechanics we would designate that as an S-lock.

(Testimony of Victor H. Langville.)

Q. What about Figures 4 and 5 in that patent? Are elements 5 and 7 an S-lock or not?

A. The figures 5 and 7, the way I see it, is the ends turned up. That is a flat bent-over portion with the ends slightly turned up, which is not the top or the bottom.

Q. But is it not true, Mr. Langville, that Figures 7 and 8 merely show that the S-lock is at the ends of the shingle shown in the Miller patent?

A. The Figures 7 and 8 show—let's see. It could be designated as the end or the top, the way I see it. [160]

Q. So that Figures 7 and 8 show the S-lock at the ends of the shingle and Figures 4 and 5 show an entirely different kind of lock at the top and bottom of the shingle. Is that not correct, sir?

A. Well, I would say that the draftsman could possibly have made it more distinct on the ends in order to make it more of a perfect S than what you have here.

Mr. Brown: I move that that answer be stricken on the ground that it is a legal conclusion only.

The Court: Overruled.

Mr. Brown: Q. Is it your understanding, Mr. Langville, that Mr. Korter is claiming the use of the so-called S-lock only in connection with the ends of the shingle?

A. I would say his S-lock is shown on the top and bottom of the shingle. The ends are flat.

Q. Is it not true, sir, then, that Miller does not show the use of the S-lock at the top and the bot-

(Testimony of Victor H. Langville.)

tom of the shingle the same way as Korter is claiming that particular element?

A. I say it is very, very close to the same. Mr. Korter might possibly have a slightly deeper impression than what is shown here. Not very much.

Q. Will you again look at the Miller patent, particularly the ridges C⁶ and B¹ shown in Figure 7, and tell the Court, sir, as to whether those ridges project upwardly from the upper surface of the shingle or downwardly from the inner [161] surface of the shingle.

A. According to my interpretation they are embossed from the inside out.

Q. In other words, they project upwardly from the outside of the shingle, sir?

A. Correct.

Q. Is it not true, too, Mr. Langville, that these upstanding ridges do not extend down to the lower boundary of the shingles as they do in the Korter shingle?

A. According to this particular drawing it comes within a short distance of the lower boundary.

Q. Do you agree, sir, that it does not extend to the lower edge?

A. According to the drawing it does not go right down to the line.

Q. Would you know, sir, if and when these Miller shingles are connected together any gutter is formed down at the lower end of the shingle through which water actually passes along that gutter, or is that curvature closed up at the joint?

(Testimony of Victor H. Langville.)

A. The way the metal is folded there is bound to be a slight opening at the end of the shingle, and it does form a gutter.

Q. Will you please tell the Court as to whether there is anything in the Miller patent which indicates the formation of condensation water on the inner surface of the Miller shingle. If so, please point to the specific place where that occurs. [162]

A. If this shingle is laid properly, I would say the condensation would be nil with proper insulation.

The Court: That answer is stricken. Answer the question.

Mr. Brown: Will the Reporter please read the question.

(Last question read.)

A. I don't see in the patent where there is anything mentioned about condensation, in the Miller patent. I fail to see it. I might have missed it in reading it.

Q. Let's turn now to the Belding patent, Defendants' Exhibit 37, will you please tell the Court whether or not Belding shows any S-type lock from one shingle to the next lower adjacent shingle.

A. Belding shows a turned-over edge without any curvature whatsoever.

Q. Would you agree with me, sir, that the ridges 13, 14 and 15, therefore, do not and cannot space the inner surface of any one of those shingles from the convolution or the upper scrolled surface of the next adjacent shingle?

(Testimony of Victor H. Langville.)

A. I didn't understand the first part of the question when you say a space. I didn't quite understand it. Will you please repeat it?

The Court: I think it should be rephrased. I don't understand it either.

Mr. Brown: Thank you, sir. [163]

Q. Do you know what the purpose of Mr. Korter's inverted ridges 12 is that extend laterally across the shingle, Mr. Langville?

A. You mean the embossing in the shingle that runs vertically?

Q. No, the wide corrugations that extend laterally across the shingle.

A. Yes. I call it embossing. Pardon me.

Q. All right. Do you know what the purpose is in the Korter patent?

A. I am not absolutely sure. My impression would be it would be for strengthening and for design. That would be my impression.

Q. That is the only purpose you know of in that case?

A. That is right. That is the only purpose I know of.

Q. Is it not a fact, Mr. Langville, that those ridges were put in there for the specific purpose of raising the inner surface of the shingle from the scroll of the interlocking joint of the next adjacent shingle? Is that not a fact, sir?

A. Well, sir, I wouldn't know. I didn't design the shingle, and I can't state that. I don't know,

(Testimony of Victor H. Langville.)

really, the purpose except for strength and possibly design.

Q. Have you ever read the Korter patent, sir?

A. I have skimmed through it once, possibly. I am not too familiar with it.

Q. Are you familiar with patents at all, Mr. Langville? [164]

A. Well, I have seen possibly about 10,000 of them from other inventors over a period of about 35 or 40 years. I have taken out two of my own. That is the extent of my——

Q. Then you have not studied Korter's claim which determines the scope of his invention, have you, sir?

A. Well, I have heard it discussed, and I formed an opinion that Mr. Korter was trying to produce either a barrier or a lead for condensation. I have heard that discussed. If you wanted me to recite the claims of the patent, I couldn't do so word for word.

Q. Assuming that Mr. Korter's ridges 12 were put in there for the specific purpose of serving as legs, if you please, to space the inner surface of the upper shingle from the scroll of the next lower shingle, will you tell us, sir, as to whether the Belding patent utilizes those lateral ridges for that same purpose or not.

A. Figure 2, No. 16, shows that the deep grooves are protruding or are not on the same plane as 13 and 15. They are quite outstanding in the picture.

Q. But did you also read, sir, on Page 1, begin-

(Testimony of Victor H. Langville.)

ning with Line 89, which says, "the ridges formed by the depressions 13, 14 and 15 are in substantially the same plane with respect to the underside of the shingles." Do you see that statement, sir?

A. Will you please repeat the number on the page.

Q. Yes, beginning with Line 90 on the first page.

A. It says, "the ridges formed by the depressions 13, 14 and 15 are in substantially the same plane with respect to the underside of the shingles." Is that what you mean?

Q. Yes. I was wondering if you had read that, Mr. Langville.

A. The underside. No. 16 shows in the picture protruding above slightly. You asked for 16, too, didn't you?

Q. But did you find in the Korter patent, sir, that the lateral ridges did extend below the inner surface of the shingle? If you would like to check on that, I will send one of those Korter shingles to you.

A. I would like to have that and also a straight-edge, please, so I can lay it across the shingle. That will determine the lowest point. I don't know if it is low or high, but I would like to demonstrate.

Q. Would you look at the shingle, then. If you require a straightedge, sir, we will give you one aluminum shingle, Plaintiff's Exhibit 2.

The Witness: Would you please ask the question again?

Mr. Brown: Yes. Would the Reporter read the question.

(Testimony of Victor H. Langville.)

(The question was read as follows: "But did you find in the Korter patent, sir, that the lateral ridges did extend below the inner surface of the shingle?")

A. I would say the surface in between the two vertical depressions [166] is higher, where the shingle itself with the small embossing is riding on whatever is underneath. Does that answer the question?

Q. What about that portion of the inner surface, sir, in the region of those lateral ridges? Isn't that portion below the upper level of the ridges?

A. You mean close to the vertical lines?

Q. Yes.

A. It has a rounded surface where it would leave a slight opening from your highest point of your vertical depression to your highest point in between, and you would have a low point there of about approximately one-eighth of an inch.

Q. Turn now to the Crawford patent, Defendants' Exhibit 30. I believe you testified this morning, Mr. Langville, that the Crawford patent does show a gutter down at the lower end of the shingle. Did you so testify? A. That is correct.

Q. But did you read, sir, Page 1, beginning at Lines 98, 99 and 100, which says: "All the folded edges fastened together are hammered down, so as to be substantially flat and perfectly waterproof." I wish to ask you as to whether under those conditions the Crawford shingle would have a gutter; that is, after it is applied to the roof.

(Testimony of Victor H. Langville.)

A. If the overturned edges were hammered down on the roof, where it would be installed, I doubt very much that the metal [167] would close perfectly tight. I believe there would be a certain amount of springage where it still would leave a slight opening. I don't believe you can take three pieces of metal or four, we will say, and squeeze them together without a certain amount of springage coming out. I don't believe they would ever be perfectly tight. Especially hammering them down on a piece of wood or on a piece of felt, or any soft material, I don't believe they would be perfectly tight. Not watertight. I would like to carry out that experiment.

Q. Is it not true, Mr. Langville, that the Crawford patent was not designed to have a gutter in view of that statement contained in the specifications which I read?

A. That, sir, I don't know. Looking at the pictures it shows quite an opening. I don't quite know if Crawford intended to have a gutter or not, but it shows so in his drawing.

Q. When you made your demonstration, sir, you put those four so-called Crawford shingles up on that easel. Did you take the trouble to lay the Crawford shingle exactly the way it was stated in the specifications of the Crawford patent?

A. I believe as close as a man can possibly do it without measuring.

Mr. Brown: May I approach the model there, sir?

(Testimony of Victor H. Langville.)

The Court: Yes. [168]

Mr. Brown: I would like the witness to leave the witness stand for a moment and to tell us as to what would happen, by demonstration, to all of these folded edges if these edges were hammered tight in accordance with the teachings of the Crawford patent, as expressed in that statement that I read previously. Will you kindly show the Court, sir, just what edges would be hammered tight in that respect and demonstrate it on the inner side, if you please.

A. If any mechanic or applicator on the roof would hammer this edge or any other edge with a piece of metal in between, you would still have enough of an opening that the water would penetrate and would come through this opening.

Q. In that case, Mr. Langville, would not it be hammered tight at least in spots along there, under those circumstances?

A. The metal in forming — this has a certain springiness, I would say, and in putting that together the only way you could possibly get that watertight or get it tight enough would be to have a block of heavy steel back of it, and then you would have to hammer every portion of this. Otherwise the springage would open up and some water would go in there. It will not be watertight in the corner, because you do have several thicknesses of material right there, and you could not obtain a watertight joint.

Q. Would you agree with me on this, Mr. Lang-

(Testimony of Victor H. Langville.)

ville, that the flattening of that down as described in the patent would close [169] this edge here and close that opening between the inner side of the shingle and the outer surface of the next adjacent shingle so that you would have no space in there?

A. I beg to disagree with you. There is going to be some space in there, in my mechanical experience. There would be some space in there.

Q. Assuming that there is no space there by this hammering-down process, sir, what would happen to any water that may have collected on the inside of that shingle? I say may have collected. In that case what would happen to that water, if anything?

A. If you have any water on the inner side, it would follow the natural lines of the edge and it would find its way out between the two units.

Q. You don't think, sir, that in the meantime any surface water underneath would drop to the rafters?

A. It would go to the lowest point, wherever that lowest point is.

Q. Would you agree, sir, that the teaching of the Crawford patent is that as a result of hammering these folded edges together the roof will be substantially flat and perfectly waterproof? Do you believe that or not?

A. I don't believe that you can hammer it and make it waterproof. I think that is against the way I have been taught. You can't get it perfectly waterproof by hammering it. You [170] can't get it

(Testimony of Victor H. Langville.)

perfectly waterproof by hammering it. You are going to leave openings someplace.

Q. Is it your opinion, sir, that Crawford could not accomplish the very thing that he set forth in his specification, which was to make a "perfectly waterproof" roof? That, sir, is on Page 1, Lines 13 and 14, together with, of course, Lines 97 to 100.

A. I believe I am going to disagree with Frederick Crawford. It would not be practical to try to hammer a roof down, every joint, because you couldn't make it perfectly waterproof unless you do solder the joints.

Q. I believe you also testified, Mr. Langville, that in your opinion, at least, the principle of Korter's invention was also shown in the Crawford patent. Did you make that statement this morning, sir, as shown on Plaintiff's Exhibit 5?

The Witness: Please repeat that.

(Last question read.)

A. I meant that any water which could be behind the shingles would show up approximately the same on both Korter's and Crawford's patent, if there was any water.

Q. By that did you mean that is on account of the fact—at least in your opinion, sir—that you would not be able to hammer the Crawford shingle absolutely tight at the joints? Was it on that basis that you made that statement?

A. Not necessarily. Not necessarily. A tight shingle has to [171] be soldered, and in the Crawford patent it is not. It cannot be tight.

(Testimony of Victor H. Langville.)

Q. Where do you find in the Crawford patent any mention whatsoever, sir, of the problem which Korter's invention was directed to, namely, the elimination of water condensation?

A. It doesn't mention condensation in his patent, and apparently he doesn't believe in condensation.

Q. Then by what right, sir, did you try to simulate the condensation of water by using that squirt-gun on the opposite side of the Crawford shingles, if you don't find it in the Crawford patent?

A. I am going to answer that if you had a backing of insulation you couldn't squirt water in there. This is only a repetition of your own demonstration. That is not a true action on a roof.

Q. But you will admit, sir, that the Korter shingle is directed to eliminate the water condensation, and you have also, I believe, admitted that the Crawford patent is not directed to eliminate the water condensation. So would you agree, sir, that we had the right to put water on the back of our shingles to simulate the elimination of water condensation but you did not? Will you agree with that?

The Court: I strike that question as being argumentative.

Mr. Brown: Will you kindly hand the witness Defendants' Exhibit 27 and one of our shingles, Plaintiff's Exhibit 2. [172]

Q. When you made that shingle, Defendants'

(Testimony of Victor H. Langville.)

Exhibit 27, did you have in front of you, sir, one of the Korter shingles, Plaintiff's Exhibit 2?

A. No, sir. Can I explain? I had in front of me at that time about a three- to four-foot piece of siding which had drain holes in the lower edge. That is how this particular opening happened to originate. That siding had been used for a long time previously, made by the Reynolds or the Kaiser Company. -

Q. Will you tell the Court, then, how is it that the opening you put in Defendants' Exhibit 27 is substantially of the same shape and substantially the same size and in substantially the same position as in Plaintiff's Exhibit 2, which is the Korter shingle.

Mr. Kolisch: Your Honor, I object to that line of questioning. He is assuming all these things, and it is argumentative.

The Court: Objection sustained.

The Witness: I don't believe that the size——

The Court: Just a moment. I have sustained the objection.

Mr. Brown: Q. Is the drain slot in there substantially in the same position as in the Korter shingle, Plaintiff's Exhibit 2?

A. You mean from the corner or from the opposite end?

Q. From the corner, the nearest corner, please.

A. There is approximately an eighth of an inch difference, and the slot is almost twice as large.

Q. In which shingle, please?

(Testimony of Victor H. Langville.)

A. I would say the width of it.

Q. In which shingle is it twice as large?

A. The Langville shingle would be twice as large in area as the Korter shingle.

Q. Is the general shape, sir, of the drain slot that you put in the Langville shingle, Defendants' Exhibit 27, substantially the same as the general shape that is in the Korter shingle, Plaintiff's Exhibit 2?

A. I have never seen the Korter shingle before, so I wouldn't know. I wouldn't know.

Q. Would you please compare them now.

A. I say the Langville shingle opening is longer and almost twice as wide.

Q. What about the general shape, please?

A. It is quite different in shape. Any rectangular opening that is twice as wide naturally would have a different shape. It is almost square compared to Korter, which is just a rectangular slot approximately an eighth of an inch or five-thirty-seconds in width. There is quite a difference if you compare the two of them.

Q. Would the drain slot in the Langville shingle, Defendants' Exhibit 27, function the same way as the drain slot in the [174] Korter shingle, Plaintiff's Exhibit 2?

A. We made 126 shingles and discontinued for the reason that it didn't serve the purpose.

The Court: That answer is stricken. Answer the question.

The Witness: I misunderstood the question, your Honor.

(Testimony of Victor H. Langville.)

Mr. Brown: Q. Was the slot you put in Defendants' Exhibit 27 designed to serve the same purpose as the drain slot in Plaintiff's Exhibit 2?

A. You mean at the time it was designed this way? You are referring to the time——

Q. Yes, that is all right.

A. Our customer at the time insisted on some kind of an opening in the lower edge, and at their suggestion we put the slot where they wanted it.

Q. Did you not testify this morning, Mr. Langville, that you engineered that particular shingle, Defendants' Exhibit 27, and not your customer?

A. I engineered it with the assistance of the customer. In other words, we take an order or a job to do anything. We don't go out and take our own ideas. It has to come from the customers, as long as they are paying the bill.

Mr. Brown: Will you kindly give Exhibit 44 to the witness.

Q. I understood you to testify, sir, that element 2 on [175] Defendants' Exhibit 44, which was the corrugations claimed of the Korter patent, read on the Belding patent. Did you make that statement in regard to the corrugations?

A. Will you please say that again?

(Last question read.)

A. May I see the patent?

Mr. Brown: Show him Defendants' Exhibit 37.

A. I said they were similar.

Q. When you made that statement, did you read the part of element 12 which says that "said cor-

(Testimony of Victor H. Langville.)

rugation ridges on the inner face of the shingle must be adapted"—I am putting that "must be adapted"—to space said reversely turned edge portion of the lower adjacent shingle from the inner face of said shingle so that moisture can travel along the inner face of the shingle and into said gutter." Did you take that into consideration, sir, as qualifying the function of these corrugation ridges?

A. I referred to it as a design or as a groove, the way I made my answer. I didn't go into the patent. I took that on its face value from the drawings.

Q. In other words, you were just looking at the Belding patent and you saw what you thought were corrugations spaced laterally of the shingle, and that is the reason you said you found the corrugations in the Belding patent. Is that correct, sir?

A. The corrugations were like the Korter patent. The water does follow those corrugations, if there is water on the inside, and would go to the gutter.

Q. Will you tell the Court, sir, as to whether or not the Belding patent has element 7, which is "a half-round portion"—referring, of course, to the interlocks—"one side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion." Will you tell the Court whether Belding has that.

A. The two end locks are reversely turned with more or less of a flat bend.

Q. Where do you find in Belding a half-round

(Testimony of Victor H. Langville.)

portion, sir, as constituting part of this interlock between the shingles? Do you see a half-round portion there or not?

A. No, there is nothing on the drawing showing a half-rounded portion when it comes to the lock.

Mr. Brown: That is all, sir.

Redirect Examination

By Mr. Kolisch:

Q. Mr. Langville, referring to the Crawford patent, which is Defendants' Exhibit 30, was Mr. Crawford in his patent concerned with waterproofing his shingle from the outside elements or from the inside?

A. My opinion would be that he was more concerned to stop [177] the water from the outside going into the roof.

Mr. Kolisch: Thank you. That is all.

Mr. Brown: That is all.

(Witness excused.) [178]

ROY WETLE

was produced as a witness in behalf of the Defendants and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Kolisch:

Q. Please state your name, address and occupation.

(Testimony of Roy Wetle.)

A. Roy Wetle. Do you want the business address?

Q. Yes.

A. 915 Southeast Hawthorne. Roofing and sheet-metal contractor.

Q. Mr. Wetle, how long have you been engaged in the roofing and and sheetmetal business?

A. 44 years.

Q. What experience have you had during that time with metal roofs?

A. Considerable with metal roofs.

Q. Have you built and applied metal roofs during the last 44 years?

A. Very few, up until about—well, for 40 years, almost, they have been discontinued. That is, the shingle type.

Q. How about other metal-type roofs?

A. Oh, yes. Tin roofs, flat tin, standing seam roofs, copper roofs, lead and composition.

Q. You have been applying that type of roof right along for the last 40 years?

A. Continuously. [179]

Q. You say you have not applied any shingle roofs?

A. That is right. Not for at least 40 years.

Q. 40 years ago what kind of shingle roofs did you apply?

A. Well, very similar to some that you have shown. Mostly a diamond-point type, though.

Q. The Crawford type that is shown over there

(Testimony of Roy Wetle.)

on the easel, is that the type of shingle that you were familiar with 40 years ago?

A. No. It would be turned so that the point would be down. It would be called a diamond point. It would be practically square but turned so that the point would be down.

Q. Now, during your years of experience in metal roofs have you ever come across the problem of condensation?

A. We come across that in very many roofs; not only roofs, but in other things, skylights, and any type of sheetmetal work.

Q. What has been your experience with respect to condensation underneath metal roofs?

Mr. Bischoff: That is objected to, may it please the Court, unless it is limited to condensation in connection with roofs of this type that we are concerned with, and as to that the witness has testified that he has had no experience.

The Court: Overruled.

A. Well, if the metal comes in contact with any warm air [180] underneath, and there is cold air outside, there will be condensation. Usually if we apply metal over an old roof, we use a vapor barrier.

Q. What do you mean by a vapor barrier?

A. Well, that is usually a waterproof paper, or semi-waterproof.

Q. What does that vapor barrier do?

A. Well, that insulates the roof so that your

(Testimony of Roy Wetle.)

temperature is approximately the same on both sides.

Q. In your experience does that eliminate condensation on the underside of the metal roof?

A. It has done very well for us, and so I assume that—that would be my opinion, that it does.

Q. Have you ever had any complaints or troubles about metal roofs that you have installed regarding the influence of condensation?

A. Yes, we have.

Mr. Bischoff: Objected to as immaterial, may it please the Court, and not applicable to the conditions that prevail here.

The Court: Perhaps you would like to withdraw the objection after his answer.

Mr. Kolisch: Q. Will you please explain, Mr. Wetle, what trouble you have had with respect to condensation.

A. Well, after installing a metal roof with no ventilation in the attic space, why, you very often have condensation. It [181] is easily solved by ventilation.

Q. What do you mean by ventilation in the attic space?

A. Well, you put on ventilators, either louvres or roof ventilators in the building, a couple of roof ventilators.

Q. Has it been your experience that if you install that this condensation is taken care of?

A. Very generally.

Q. If there should happen to be any moisture

(Testimony of Roy Wetle.)

from underneath a shingle on a metal roof of any type in your experience what happens to that moisture?

A. Well, the moisture—the very little that I have ever seen form on it will be absorbed in this same waterproof paper or the wooden deck under it. It just depends on whether it is a new or an old roof.

Q. In your experience is there any problem in dissipating or getting rid of any such water that may form? A. There never has been.

Q. I am sorry. I didn't hear you.

A. There never has been.

Mr. Kolisch: You may cross examine.

Mr. Brown: No cross examination.

(Witness excused.) [182]

JAMES W. DeYOUNG

was produced as a witness in behalf of the Defendants and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Kolisch:

Q. Will you please state your name, address and business.

A. James W. DeYoung. My place of business is 1019 Southwest 10th Street.

Q. What is your business, Mr. DeYoung?

A. I am an architect.

(Testimony of James W. DeYoung.)

Q. For how many years have you been an architect?

A. I was as a boy apprenticed in 1900 in an architect's office.

Q. You have been engaged since 1900 in architectural work?

A. Yes, sir; except during World War I for a short time.

Q. Have you ever had any experience with roofs made from metal or metal shingles?

A. Yes, sir.

Q. Have you had applied to buildings that you have designed and on which you have acted as architect such roofs?

A. I have.

Q. Are you familiar with the patented shingle, Plaintiff's Exhibit No. 2?

A. No, I am not. I have seen the shingle, but I have had no experience with it and haven't used it. [183]

Q. Have you used any type of metal shingles on buildings that you have designed or acted as the architect on?

A. I have.

Q. What kind have you used?

A. Well, some thirty-five years ago we used copper shingles.

Q. Can you describe what that copper shingle was like.

A. It was similar to this, only of different pro-

(Testimony of James W. DeYoung.)

portions. It was more like this. The locks and things were similar to this, but it is pretty hard to say that they were similar. They slid together.

Q. The type of shingle that you are describing, were those shingles fastened to one another by overlapping edges which were interlocked?

A. Yes, sir.

Q. I take it you have been present in court here for the last few days and have heard what the witnesses have had to say concerning this problem of condensation?

A. Yes, sir.

Q. In your experience do you have anything to do concerning condensation underneath metal or metal shingle roofs?

A. In my experience and in my own practice in laying a metal roof we always put felt under it to protect it against the change in temperature or if there is any moisture that gets through it is absorbed in the paper.

Q. Now, in buildings which you have designed and have prepared [184] specifications for have you specified that there be a provision for drainage or drain slots underneath metal roofs to take care of any water that may form there?

Mr. Bischoff: That is objected to, may it please the Court, as immaterial and irrelevant. The issue is whether this particular shingle has been made and does function and the question of patentability and infringement. It is not a shingle designed to be put up under specific conditions under which this witness or some other architect may design a roof. We

(Testimony of James W. DeYoung.)

are concerned with the issue of whether it functions under the various conditions that may arise. This question is directed to what he would do, what this witness would do, in connection with some roof that he designed. That is not relevant to the issue of validity that we have here.

The Court: It may not be, but I am not going to be disturbed by it. Objection overruled.

Mr. Kolisch: Answer the question.

The Witness: The question, please?

(Last question read.)

A. No, sir. We have made no provisions for drain slots.

Q. Now, I call your attention to the patented shingle which you have before you and ask you if you have noticed the provision for a drain slot in that shingle? A. Yes, sir.

Q. Would you specify a shingle having a drain slot like that [185] in the construction that you acted as the architect on?

Mr. Bischoff: Objected to as immaterial.

The Court: Yes, I think that has nothing to do with it. Objection sustained.

Mr. Kolisch: Q. In your opinion, Mr. DeYoung, does the provision of a drain hole in a shingle such as you have before you constitute a structural improvement?

A. I can't see it has any value.

Mr. Bischoff: Just a moment, please. Objected to as immaterial, and on the further ground he has

(Testimony of James W. DeYoung.)

not been qualified as an expert to express an opinion.

The Court: I think that is correct. Objection sustained. Besides, you are asking him the very question you want me to decide.

Mr. Kolisch: You may cross examine.

Mr. Brown: No cross examination.

(Witness excused.) [186]

HARRY X. BERGMAN

one of the Defendants herein, was produced as a witness in behalf of Defendants and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Kolisch:

Q. Will you please state your name, address and business.

A. Harry X. Bergman, 256 Northwest Macleay Boulevard, Portland. I am partners with my wife in the operation of six women's ready-to-wear stores; also a hotel. We are joint partners, and have been for twenty-nine years.

Q. Now, are you connected with the defendant Perma-Lox? A. Yes, I am.

Q. What is your connection?

A. I am president of the corporation.

Q. Mr. Bergman, when did you become interested in aluminum shingles as a business?

A. It was in the spring of 1952.

(Testimony of Harry X. Bergman.)

Q. How did you launch yourself in this business?

A. Well, I happened to know a lot of men in the business, and I was approached—one man who approached me was a Mr. Polsky, who claimed he had a set of dies, and he asked me if I wouldn't enter into an agreement with him to go into business with him.

Q. Then what did you do?

A. Well, I proceeded to investigate. I wanted to see if his [187] dies were in good condition, so we had them tried out at different places, and they didn't work right. So in the process I was informed about a company that was called the American Aluminum Shingle Corporation, who were operating at the time, that had some dies and a little merchandise on hand. I went over there and I talked to a Mr. Losli, who told me that he had a set of dies and aluminum, and that he was engaged in the sheetmetal business and didn't have any time for this other thing, and he would be interested in selling out. I asked him about patents, whether there was any patents involved, and he said that as far as——

Mr. Bischoff: We object to hearsay testimony, may it please the Court.

The Court: Objection sustained.

A. We agreed upon a price and I bought out the corporation.

Mr. Kolisch: Q. That was the American Aluminum Shingle Corporation?

(Testimony of Harry X. Bergman.)

A. American Aluminum Shingle Corporation.

Q. Then did you have somebody continue manufacturing shingles for you of the type the American Aluminum Shingle Corporation had?

A. Yes, sir; Mr. Langville, who had been making these shingles for the American Aluminum Shingle Corporation, made them for the Perma-Lox Corporation.

Q. Mr. Bergman, are you thoroughly familiar with the patented [188] shingle and with the accused shingle?

A. Yes, sir; I am.

Q. Will you please take Plaintiff's Exhibit 2 and Plaintiff's Exhibit 3. Referring to the accused shingle, Plaintiff's Exhibit 3, will you please point out what features that shingle has as a shingle.

A. Well, No. 1, it has a lock on the top and bottom which is called a loose U-lock or slip seam, and on the edges it also has a loose lock.

Q. Will you compare those locks with the construction on the patented shingle.

A. On the other shingle the lock on the top and bottom is an S-lock. The S-lock forms a tight lock and will not allow for expansion and contraction. The locks on the other side are the ordinary slip seam lock that is used in metal work. Now, on our shingle here in our upper left corner we have a patent-applied-for watertight lock. It is metal that protrudes on this corner and overlaps. When it is hooked into this other shingle, it forms a watertight lock on top, where a lot of water as a rule has a tendency to leak in.

(Testimony of Harry X. Bergman.)

Q. Is that to prevent water from the outside——

A. To prevent water from leaking in from the outside.

Q. How can water from the outside get in there?

A. Well, ordinarily—I wonder if I could have another one of these so I can explain. Now ordinarily when two of these [189] are hooked together——

Q. Are you now referring to the patented shingle?

A. The patented shingle. If you look up in the corner, you will see light coming through, and where there is light coming through water can be driven in there with a high wind and rain. It can blow water through there. We have eliminated that by our lock.

Q. Would you please engage two of your shingles together.

A. Now, in locking these together and looking underneath there you can't see any light at all going through, because it has been blocked off by this extra end metal which has been added to the shingle, eliminating any chance of water entering at this point.

Q. Will you continue with your comparison of the two shingles.

A. Now, our markings or embossings are in there for a purpose. The purpose is to add strength. These lines add a lot of strength to this.

Q. That is the accused shingle?

A. Yes. Also, this line in between——

(Testimony of Harry X. Bergman.)

Q. What are you referring to?

A. This groove in between.

Q. The vertical groove?

A. That is right. That is put in there for the purpose of strengthening and nothing else because, as you see, it is good and strong and will not rattle.

Q. What are you doing now, when you shake the shingle?

A. Yes, that is just to prove that it adds a lot of strength.

Q. Do you find such features in the patented shingle?

A. Well, I find a groove here which the inventor claims lays on his roof and that forms a footing. Anyone knows that when any part of a shingle touches a roof that the point which is low, if there is any water on there or condensation, it will run onto the roof in place of into the gutter. On ours this line never hits any part of the roof. It is above.

Q. What line are you referring to, Mr. Bergman?

A. The groove in between the equally spaced lateral points.

Q. It does not project beyond the reversely turned edges so that it will rest on the roof?

A. That is right.

Q. As in the patented shingle?

A. That is right, sir. Ours will not rest on the roof. Ours is away from the roof at all times, and if there is any water up behind it will easily drain off without hitting any part of the roof.

(Testimony of Harry X. Bergman.)

Q. All right. Are there any other comparisons that you can make between these two shingles?

A. Well, in our corner, the right and left-hand corner, provision is made to hook these shingles together. With this opening here it allows any moisture, if it forms, to drain off of this hole naturally, right through the seam here. As far as [191] clogging, when these things are hooked together the expansion and contraction will open those up, and whenever it expands and contracts the natural flow of water will wash away anything that could blow up in there.

Q. Referring to the patented shingle, what do you find in the gutter of the patented shingle?

A. I also find a little opening on the end, a drain slot.

Q. Are there any other features or comparisons you wish to make between the two shingles?

A. Well, on ours we have an extra stiffening line right on the end of the shingle here, which is not in this other shingle.

Q. You mean the patented shingle?

A. In the patented shingle. Also, in locking ours together it will easily allow water to drain off at either end without any trouble at all. Now, in this other shingle here——

Q. You are referring to the patented shingle?

A. In the patented shingle here, if it was possible for the Court to see that by locking these together, it actually blocks off any access of any water to this little hole. Now, if the Court would allow,

(Testimony of Harry X. Bergman.)

I have prepared a little thing and if the opposing attorney doesn't mind I would like to show the Court——

Mr. Kolisch: This, your Honor, is not an exhibit, but it is the same shingles that are in evidence now, and one of them is merely cut away to show what goes on behind two shingles [192] when they are secured to each other.

The Court: Why wasn't it marked?

Mr. Kolisch: This was an exhibit which was prepared only since the beginning of the trial, your Honor.

The Court: All right. I exclude it.

Mr. Kolisch: All right. It is excluded.

The Witness: If this shingle here is hooked together as it was intended to, it forms a tight S-lock in the gutter and will cut off any chance of any water getting out to a high degree.

Q. You are referring to the patented shingle?

A. Yes, sir. Right through there. And this other edge form an S-lock that goes down to the bottom of the gutter, cutting off any chance of water flowing down easily through this slot, the drain slot. It comes out of the ends.

Mr. Kolisch: You may cross examine.

Cross Examination

By Mr. Brown:

Q. Mr. Bergman, aren't you the General Manager of the Perma-Lox Corporation?

A. Yes, sir.

(Testimony of Harry X. Bergman.)

Q. And, in general, you have charge of the design of any shingles that your corporation puts out?

A. Yes, sir. [193]

Q. Now, on that last answer that you gave, when you said that a part of the upper shingle at the S-lock would come down so tight as to prevent any water from going through, were you here at the time, sir, that we put on that demonstration?

A. Yes, I was.

Q. Did you see any water coming through on the front side, even though that S-lock was tight?

A. Where did it come out, though? Through the hole or through the seam? I noticed water coming out, but was it established where it came from?

Q. But at least you saw water coming out, did you not, sir, in the neighborhood of the drain opening?

A. Yes, sir; I saw water coming out.

Q. I think you said, Mr. Bergman, that those wide grooves in your shingle were put in there for strengthening purposes. Did you make that statement?

A. That is right, sir.

Q. Would they not have the same strengthening effect if you had put the grooves up the other way, the same way as the Miller patent, for example?

A. Yes, they would have the same effect, to strengthen.

Q. Then for strengthening purposes why did you put them downwardly, the same as Korter, instead of upwardly, the same as Miller? [194]

A. Because it looked better.

Mr. Kolisch: I object to that question, as to do-

(Testimony of Harry X. Bergman.)

ing it the same as Korter.

The Court: Overruled. Besides, the witness has answered.

Mr. Brown: Q. Now, coming to that slip seam which I think you said you may have invented, Mr. Bergman——

A. The slip seam? No, sir. That was invented before you and I were born.

Q. I mean that little appendage that you have up there in the upper right part of your shingle.

A. This lock? This is called a watertight lock.

Q. A watertight lock? A. Yes, sir.

Q. You said on account of that you could not see light through two of your shingles. Did you make that statement? A. Yes, sir.

Q. If you were to take that watertight lock off, would you see the light through two of your shingles? A. Yes, sir.

Q. I think that you said you saw the light with two of Korter's shingles, did you not?

A. Yes, sir.

Q. I assume you have read the Korter patent and the claims, Mr. Bergman, have you?

A. Yes, sir. [195]

Mr. Kolisch: Your Honor, this witness was not examined on the patent. He was examined on the structure.

Mr. Brown: As I understand, this witness, your Honor, was put on the stand to show that his shingle did not infringe the Korter patent. I believe that was the purpose of putting this witness on, and I

(Testimony of Harry X. Bergman.)

would like to see wherein he thinks he did not infringe the Korter patent.

The Court: I understand now that he is not being offered as an expert, and that this is simply on structure. You may cross examine on structure.

The Witness: I would like to answer the question.

Mr. Brown: Q. Is it not true, Mr. Bergman, that you have this so-called S-interlocking joint along the top and the bottom edges of your shingle?

A. No, sir; we don't.

Q. And is it not true, sir, that you have curved outer edge portions for interlocking the shingle with laterally adjacent shingles at the top and lower edge portions?

A. Well, if you wish to be technical, these are not interlocking. These are hooked together in a very loose manner, allowing for expansion and contraction. These are not interlocking, as you would call this other. Would you call this interlocking?

The Court: You are supposed to answer the questions and not ask them. [196]

The Witness: Excuse me.

Mr. Brown: Q. Are you trying to tell the Court, then, Mr. Bergman, that you have loose shingles with your lock when they are put together?

A. They will not lock, sir.

Q. Then are they watertight when they are put together?

A. They are watertight. Yes, they are watertight.

(Testimony of Harry X. Bergman.)

Q. Do you agree, Mr. Bergman, that you do have a half-round portion down at the bottom of your shingle one side of which is tangent to the plane of the shingle? A. Beg pardon, sir?

Mr. Brown: Would you read the question, please.

(Last question read.)

A. Tangent to the plane? Will you explain that, please? Will you explain what you mean by your question?

Q. Yes. By tangent, Mr. Bergman, we mean round like this, sir, and then this is tangent (illustrating). You see that is a continuation of it. It is straight and then it rounds. A. Yes, sir.

Q. You have that. I believe you have also admitted, sir, that you do have a gutter at the bottom of your shingle, do you not? A. Yes, sir.

Q. You also have a drain slot there, do you not, in the gutter? [197]

A. Well, I have heard you call it a bleeder. I will call it a bleeder, or if you want to call it a drain slot you can. It is the edge of a seam.

Q. But you called it a drain slot, did you not, in the testimony that you gave here a short time ago?

A. Yes, I did. At that time I wasn't acquainted with the technical point, what you were calling that. Now I understand it is called a bleeder joint.

Q. You have a fastening tab, do you not, on your shingle? A. Yes, sir.

Q. Did I understand you to testify, sir, that any water condensation that appears on the back of

(Testimony of Harry X. Bergman.)

your shingle would run down into the gutter and then out through the drain slot at the end of the gutter?

A. Well, if any forms—it is very likely very little would form—it would come out the end of the gutter.

Mr. Brown: That is all.

Mr. Kolisch: That is all.

(Witness excused.)

Mr. Kolisch: Defendants rest. [198]

Mr. Brown: May we recall Mr. Richardson in rebuttal, your Honor?

The Court: Just a moment. I understand that you asked this morning for a continuance after the defendants' case in order to meet some of these factors. Do you want that continuance now?

Mr. Bischoff: Your Honor, may I have a moment to confer with Counsel about that?

The Court: Yes. I will have to say that I have an engagement at 4:00 o'clock, so anything that happens will have to go over until tomorrow morning anyhow.

Mr. Bischoff: May I answer your Honor's inquiry in the morning?

The Court: Yes.

(Thereupon an adjournment was taken in the above matter until Wednesday, March 31, 1954, at 10:00 a.m.) [199]

Portland, Oregon, March 31, 1954, Court reconvened, pursuant to adjournment, and proceedings herein were resumed as follows:

The Court: You may proceed.

Mr. Bischoff: May it please the Court, in answer to the inquiry your Honor made at the conclusion of yesterday's session of court, I wish to advise that the plaintiff will not ask for a continuance.

The Court: All right. Proceed.

Mr. Brown: May it please the Court, we will call Max Richardson in rebuttal.

MAX C. RICHARDSON

was recalled as a witness in behalf of Plaintiff, in rebuttal, and was further examined and testified as follows:

Direct Examination

Mr. Brown: Your Honor, the other side presented ten patents which they felt had some anticipatory effect on the Korter patent, but during their testimony they referred to only four. We think, however, it is incumbent to go over all ten in a brief manner just to complete the picture.

Q. Mr. Richardson, will you please tell the Court just in general what the object of the Korter invention was. [200]

A. The main object of this invention is to devise a metal shingle of interlocking type in which provision is made to prevent leakage from heavy runoff, or condensation, or both.

Q. Will you refer to the claim of the Korter patent and tell me whether or not that claim is a combination claim. A. Yes, sir.

Q. And by a combination claim what do you mean?

(Testimony of Max C. Richardson.)

A. I mean a claim which includes as a requirement of a complete structure more than one element, all of the elements included being listed in the claim.

Q. Now, in that combination of elements do those elements cooperate with one another?

A. Yes, sir.

Q. And do they give one a new and unexpected result?

A. Yes, sir.

Q. That is, to be a true combination?

A. That is right.

Q. Now, looking at Korter's claim, where you have corrugations in said shingle, and later those corrugations are mentioned as facing the reversely turned top edge portion of the lower adjacent shingle from the inner face of the shingle, do those corrugations have a function which cooperates with the rest of the elements of that claim?

A. Yes, sir.

Q. And what is that function, sir? [201]

A. That function is to hold the shingle over its major area away from the roof, and to hold the gutter at the lower end of the shingle open so that the water of condensation can run down the underside of the gutter free of the under-roof structure and be collected in the gutter.

Q. Later in the claim it mentions the top and bottom edge portions of the shingle being reversely turned on opposite faces thereof, each of said top and bottom turned edge portions comprising a half-round portion, one side of which is tangent to the

(Testimony of Max C. Richardson.)

plane of the shingle and the other side of which terminates in a reversely curved portion to form a gutter. What is the cooperation of that element with respect to these ridges that you have mentioned?

A. The ridges space the shingle from the roof so that the water of condensation will be prevented from being absorbed by the roof structure and the water will run down the underside of the shingle. And this gutter is for the purpose of giving that water a place to be safely drained to.

Q. Later it mentions a drain slot disposed in the gutter of the shingle. How does the drain slot cooperate with the other elements of the claim, and particularly with the ridges that you mentioned and also the gutter that you have previously referred to?

Mr. Kolish: Your Honor, the defendants object to this line of questioning. In the defendants' case we didn't put [202] in anything concerning the combination and aggregation of elements in the Korter patent. We don't believe that this is proper rebuttal.

The Court: As I understand it, you attacked its validity. You put in testimony attacking its validity.

Mr. Kolisch: Yes, sir.

The Court: Why isn't it proper rebuttal? It is to escape the claims of prior art.

Mr. Kolisch: If he was discussing prior art, that is something else. He is discussing the question of a combination of elements. Now it is perfectly all right with me. I merely call this to the Court's attention.

(Testimony of Max C. Richardson.)

The Court: Of course, the elements of prior art are present in a combination patent.

Mr. Kolisch: Yes, certainly.

The Court: So he is trying to show that it is a real combination as compared with a loosely assorted aggregation of prior art, which might not result in a functional combination.

Mr. Kolisch: Yes, I understand.

The Court: I take it that is the purpose of his line of questioning. All right.

Mr. Brown: Q. These elements that I have referred to, Mr. Richardson, do they or do they not cooperate together, sir, in order to perform that last function, to-wit, so that [203] moisture can travel along the inner face of the shingle and into said gutter?

A. Yes, sir; they do. However, the drain slot itself is not involved in that last statement you made. It is involved in draining the gutter. It is not possible, of course, to have that gutter large enough to hold any admitted quantity of water. It has to be disposed of before it does damage to the roof, and the gutter is a receiver for the water of condensation, and there has to be means for getting the water of condensation into the gutter and means for getting it out of the gutter. And the structure shown in the patent, the ridges 12, spacing as they do the shingle from the roof partially, and spacing the underside of the shingle from the rolled lower edge of the gutter, keep the gutter open for the admission of condensation, and then there is a drain

(Testimony of Max C. Richardson.)

slot disposed in the gutter for the disposal of that water of condensation. It is a continuously working process.

Q. Will you now refer to the Lewando patent, No. 124,963, which is Defendants' Exhibit 32.

A. I have it here.

Q. Are you familiar with that patent, Mr. Richardson?

A. Yes, sir.

Q. Will you kindly briefly summarize just the disclosure of that patent, please.

A. I will try to keep within bounds and not make the story [204] too long, in so far as the patent could effect or be prior art on the present Korter patent. Now in the Lewando patent old art is shown of laying a shingle flat on a roof and sealing the adjacent shingles together so that the shingles after installation become a continuous hermetically sealed metal sheathe over the entire roof, thus allowing no air circulation under the roof, and thus not creating the problem of water condensation. So that the Lewando patent could teach nothing in the art of an improved shingle. It might be of interest there to quote in the second column of the old Lewando patent, the patent being so old that the lines are not numbered. In the middle of the second column it shows how the plates are locked together on the roof, and then it says:

“When this is done and all the joints carefully filled with cement, the lapels m-k-l may be nailed down over the point of junction of all the joints.

(Testimony of Max C. Richardson.)

These operations are to be continued until the whole roof is covered.”

The full intent and the only possible way it could be operated is as a continuous metal roof with all joints sealed. It would not apply to the present type of shingle or purpose.

Q. Do you find anything in this patent, sir, express or implied that has to do with the water of condensation or the [205] elimination of that water?

A. Nothing is said. It could only be implied by the natural condition, that without circulation of new air carrying moisture to the underside of the roof there could be no moisture brought in to the underside of the roof, and that since the sheathing is as finished hermetically sealed there could be no moisture.

Q. Are these shingles what is called a diamond-shape? A. Yes, they are.

Q. Do these shingles, sir, have top and bottom and lateral edges when they are placed in position?

A. Not definitely, no. They have four sides, but they are all diagonal sides. Any of the sides could be called a top or a side or a bottom or a side, but they have no definite top or side edges.

Q. Do you find any gutter or any drain slot either in the drawing or implied from the specifications?

A. No. In a diamond-shaped shingle of this type you really don't have gutters. You have downspouts, if they are open. The lead is vertically down to

(Testimony of Max C. Richardson.)

what is substantially side-confining seams. They don't have what you would call a gutter, which is considered ordinarily to be of a horizontal nature.

Q. Will you now kindly refer to Lewando Patent 140,928, which is Defendants' Exhibit 33.

A. Yes, sir. [206]

Q. Are you familiar with that patent, sir?

A. Yes, sir.

Q. Will you please tell the Court in a summary way just what that patent discloses.

Q. It is an improvement over the previously mentioned patent in so far as the previously mentioned patent had the nails exposed at the lower tab corner, and this patent has the improvement of forming a lower corner so that it can be turned under and cover the nails of the lower tab corner.

Q. Do you find anything express or implied in that patent dealing with the water of condensation and getting rid of that water, sir?

A. This patent recites substantially the same conditions as the other one, and repeats the requirement of joints filled with cement.

Q. Do you find in this Lewando patent or the other one that you referred to any ridges that extend downwardly from the inner surface of the shingle?

A. No, sir.

Q. Will you please refer now to the Slaughter patent, No. 220,181, which is Defendants' Exhibit 35.

A. Yes, sir.

Q. Are you familiar with that particular patent, Mr. Richardson?

A. Yes, sir. [207]

(Testimony of Max C. Richardson.)

Q. Will you briefly summarize that patent for the Court.

A. The principal effort in making this patent has been, apparently, to make a cheap shingle with very little waste. In doing that the method of construction is simple and the method of installation is simple. In place of a nailing tab they have just made another overturned upper interlocking joint so that the joint can be nailed in the fold and still have an extension out to engage the next upper shingle. That is the feature of the patent.

Q. Is there any mention therein of the water of condensation or getting rid of that water, sir?

A. I don't remember that there is.

Q. Are there any corrugations or ridges on the inner face of the shingle?

A. No, sir.

Q. Any drain slots or gutters?

A. No, sir.

Q. Is it designed to lay flat on the roof?

A. Yes, sir.

Q. Where a shingle is designed to lay flat on a roof, is there any opportunity for the water of condensation to collect?

A. If it is properly designed to lay flat on the roof, air laden with moisture would be prevented from circulating under it. It is entirely possible to lay a shingle flat on the roof and not protect it properly and have moisture form. [208]

Q. Kindly refer to the Cusack Patent 303,921. Defendants' Exhibit 36.

A. Yes, sir.

Q. Are you familiar with that patent, sir?

(Testimony of Max C. Richardson.)

A. Yes, sir.

Q. Please explain that, briefly.

A. The essential object of the invention is to produce a roof which shall be watertight and externally fireproof, and which was adapted to be readily applied to a roof. The object, apparently, is to overcome the listed difficulties with previous shingles—"but in all such instances known to me either the blank has been cut to greatly waste the material or the interlocking parts have been so formed as to render the completed roof liable to leak." So his object was to make a watertight roof out of the simplest structure with the least waste possible.

Q. When you have a watertight roof, does such a roof permit the exclusion of any water that might be underneath the roof?

A. A successful operating watertight roof would not allow circulation in either direction through the joints.

Q. Do you find anything concerning the condensation of water in the Cusack patent or any means for eliminating the same, sir?

A. No. As a matter of fact, the patent definitely brags about the forms with all corners overlapping and piled tightly [209] together so that there can be no exchange of moisture from the inside to the outside.

Q. Would you call the Cusack shingle a diamond-shaped shingle or not, sir?

A. Yes, I would.

(Testimony of Max C. Richardson.)

Q. In that event does it have a top, a bottom and sides, also, a top and a bottom and lateral sides as it is laid?

A. No, not with any definition.

Q. Are there any corrugations from the inside of the shingle, sir, extending downwardly?

A. No, sir.

Q. Is there any provision for raising the shingle from the roof at all in that case?

A. No, sir; except by a pile-up at the corner, which could only be the thickness of the piled-up metal. In Figure 5 there is shown in an exaggerated way a very thick pile-up of metal. But of course that is only for illustration. The pile-up would be very small, because if you had five or six thicknesses of 20/1000ths-gauge metal you would only have a tenth of an inch when you got through, and it would be only a small pile-up, although from the way Figure 5 looks it looks as though it might be an inch or so. But that pile-up is at the corner only, and from the way the shingle is held to the roof that must immediately slope right down to the roof.

Q. Kindly refer now to the Crawford patent, 553,514, Defendants' [210] Exhibit 30.

A. Yes, sir.

Q. Are you familiar with that patent, sir?

A. Yes, sir.

Q. Will you please summarize the disclosure of that patent for the Court.

A. The object of the patent is "an extremely

(Testimony of Max C. Richardson.)

simple and cheaply-constructed shingle which may be readily secured to the roof, and which, when the shingles are fastened together, will be perfectly waterproof." The shingle is a flat shingle and is intended—at least, with nothing to prevent it laying flat on the roof. The intent is to make the seams such that they are hermetically sealed, and the method of doing that is: "all the folded edges fastened together are hammered down, so as to be substantially flat and perfectly waterproof." Now they could be hammered down so that they were not waterproof, but the patent says that they are hammered down so as to be substantially flat and perfectly waterproof. That is what the patent teaches.

Q. In your opinion did the demonstration that was put on the other day, sir, in connection with this Crawford patent represent a true facsimile of the Crawford shingles as used on a roof?

A. It could not have been, no.

Q. Why not, sir? [211]

A. Well, because they were not assembled. The Crawford shingle is not a completed shingle until it is laid in its usefully employed position. The Crawford shingle is a formed shingle ready to be finished as it is shown here.

Q. Then it was not in the finished state in the demonstration?

A. It is not a Crawford shingle until it is applied to a roof in the way that it is intended to function.

Q. Would there be any gutters at all in the

(Testimony of Max C. Richardson.)

Crawford shingle, sir, when they are hammered down flat? A. Of course not.

Q. Do you find any corrugations or ridges, sir, in the Crawford shingle that extend downwardly from the inner face of the shingle?

A. No, sir.

Q. Are there any drain slots in the Crawford shingle as it is finally finished?

A. No, sir.

Q. Will you kindly refer to the Clawson patent, 1,026,202, sir, Defendants' Exhibit 34. Are you familiar with that patent? A. Yes, sir.

Q. Will you kindly summarize for the Court, please.

A. This is a diamond-shaped patent. The principal element of novelty is a small dam across the base of the tab at the upper portion to prevent the rain driving in under the tab. [212] And the patent is a perfectly flat shingle, undoubtedly intended to lay flat on the roof, and therefore as a requirement of that type of operation, if it is to be successful, the joints would be intended to be tight. Nothing is shown in the specifications or drawings which would indicate that the joints were anything but straight folded joints interlocked and tight together.

Q. Do you find any corrugations or ridges in the Clawson shingle, sir?

A. No, sir. The only embossing of the flat tab is the dam 8, which is numbered in Figures 1 and 3. Wait a minute. It is apparently numbered 9 by

(Testimony of Max C. Richardson.)

mistake in Figure 2, since Figure 2 has two reference numbers 9.

Q. Is there any turned bottom portion of the Clawson shingle? A. No, sir.

Q. Will you please explain just what is meant by a bottom portion as described in the Korter patent?

A. The bottom portion is that area of the shingle along the lower horizontal edge.

Q. Is there any mention of the condensation of water or the elimination of the same, sir?

A. In Clawson?

Q. Yes. A. No, sir.

Q. Is this shingle a rectangular shingle as defined by the [213] Korter patent?

A. It could be, of course. It is a rectangular shingle, but not as defined by the Korter patent; no, sir. There are two shapes, Figure 2 and Figure 5. One is rectangular and one is diamond. But of course it is a diagonally laid shingle, and it could not be a rectangular shingle as the Korter patent.

Q. Please now refer to the Pruden patent, 1,406,757, Defendants' Exhibit 40.

A. Yes, sir.

Q. Are you familiar with that patent, sir?

A. Somewhat, yes.

Q. Will you please summarize the disclosure of that patent.

A. The disclosure of that patent is a fragmentary disclosure of an apparently prefabricated metal

(Testimony of Max C. Richardson.)

house structure. It has no reference to shingles whatsoever.

Q. Will you explain the function of the perforations 17 in Figure 2 of that patent.

A. Yes. The function is very nicely apparent from Figure 1 of that patent. In order to make the assembly of this prefabricated house as easy as possible they have element 25 which with the element fastened and with element 11 is hung over the side frame and that holds the roof corrugated sheathing down onto the structure. And since they have that element and it is made of bent-up sheet steel, and since it [214] dams or forms an eaves trough for each one of the individual grooves in the corrugated roof, they merely cut it open so as to let the water go on through. That is all for water from the outside which would normally come onto the roof, whether it was rainwater or melting snow, or anything of that kind.

Q. Does this patent have anything to do, sir, with the water of condensation and how to eliminate it?

A. I would not like to be facetious about the matter, but this patent shows that they will have a lot of trouble eventually, but it doesn't say anything about handling it or how to get rid of it.

Q. Then the perforations 17 do not handle any water of condensation, sir?

A. No water from the underside of the roof; no, sir.

Q. Please now refer to the Belding Patent

(Testimony of Max C. Richardson.)

1,971,517, Defendants' Exhibit 37. Are you familiar with that patent, sir? A. Yes, sir.

Q. Will you summarize the disclosure of that patent.

A. That patent covers a roof construction with a subcombination of a metallic sheathing for a clapboard, and they have seen fit to call this metallic sheathing for a clapboard a shingle. That patent is a very interesting patent for the reason that in order to construct a house of the Belding construction the clapboards of which the roof is made are laid [215] horizontally on the roof end to end, and in horizontal rows, overlapping vertically. And each clapboard row as it is laid is nailed at the top and left free at the bottom, and the succeeding clapboard above it is nailed at its top, and its lowest free end overlaps the nailed end of the one underneath. Then when they get the house covered with the clapboard, which is part of the invention, they take and start from the top and go back down this roof by nailing the upper end of these individual board sheaths to the structure above or at the upper end of the clapboard—rather, before they do that there is a hooked element at the lower end of the shingle or sheathe, metal sheathe, and it is drawn up under the free end of the clapboard and then the top end is nailed.

Q. Will you point that particular feature out to his Honor.

A. Your Honor, these are the clapboards which are part of the construction, and as they are laid

(Testimony of Max C. Richardson.)

from the bottom up overlapping they are nailed at this point, that being a nail through the board only. Then after they have got all of those boards on the roof they start back down and take the top shingle and hook it under the free end of this clapboard, assuming that the top has been held there by a ridgepole, or some other way, and then the protruding end of the shingle is nailed here. The shingle is used to hold the clapboard onto the roof as well as to shield the roof. Then the next shingle is brought in, hooked under here, and the tongue-and-groove [216] joint is shoved in under this one, and then this one is nailed down here to this one. That is, this roof is made by laying clapboards up the roof and coming back with the sheathing element for the clapboards back down the roof. The horizontal joints are tongue-and-groove joints.

In the matter of condensation this is a very interesting patent, because it brings in the problems indirectly which must be solved. The problem of condensation—and it is a problem—was newly brought to the field in a critical way when aluminum was to be used for shingles for the reason that aluminum, at the time the shingles were first used—and Mr. Korter first used shingles—aluminum was not successfully welded in the field. Aluminum required special welding equipment and was not successfully welded in an economic way so that it could be used for soldering or welding roof joints together. Therefore, to use aluminum for a roof it was necessary to make a shingle which nec-

(Testimony of Max C. Richardson.)

essarily you could not very well make airtight and entirely free of air which would carry moisture to the underside of the roof.

Then in order to get around that problem—Mr. Korter did it in his own way, but this Belding patent is extremely interesting because you look over here, and the assignor is the Aluminum Company of America. They would undoubtedly have been interested in making aluminum shingles as a commercial item. But their way of doing this was not to [217] accumulate moisture and drain it in a simple manner, as Mr. Korter did. Their way was to insulate the metal sheathing in such a way that this insulating clapboard was tight against the shingle except for a small upward embossing of the underside which they hoped would circulate air. But they don't go to the ends of the board. Therefore, the air circulation would only be by diffusion and probably would not be successful.

The parts 4, if your Honor would look, these spaces where the board does not come clear in to the end, are not gutters. They are air ducts put there specifically for the purpose of attempting to dry the underside of those shingles by circulating air. Now, they have some opportunity of working for this reason: That since the roof itself is insulated—and that is definitely an insulating board, that clapboard 17—the heat from the underside is more or less barriered by that insulator from the underside of the shingle so that the shingle would be substantially the same temperature on both sides,

(Testimony of Max C. Richardson.)

and any air that got up there would be substantially the temperature of the outside air. So that the air that got up there would not drop moisture because it would not hit a chilled surface. It is already at the temperature of that surface, and if it is not already 100 per cent humid it will take up some moisture with it. And with a structure which would prevent condensation at a high rate, this air duct [218] 4 plus the incomplete circulation which would be accomplished through their little corrugations or embossed pattern, which they call 11—no, wait a minute. That is not it. No, their embossing pattern lines are called 13, 14, 15 and 16, all coming down to the same level on the underside of the shingle. And if you will notice in the patent picture, particularly in Figure 1 of that patent, very few of those are open to the edge of the shingle. You will notice that, as the ends are curled around, showing that they come down to the undersurface of the shingle, very few are open. It might be that the ones along the bottom would be open in spite of the apparent draftsmanship in the drawing, but certainly those farther up have no way of getting air from that air duct 4 into them.

It is an expression of an intent or a wish, but not necessarily of the completion of a result.

Q. Does the Belding patent, sir, show any reversely turned interlocking joints?

A. They do on the side edges.

Q. But not on the top and bottom edges, sir?

(Testimony of Max C. Richardson.)

A. Not on the top and bottom edges. It is a tongue-and-groove joint.

Q. Do these corrugation ridges 13, 14, 15 and 16, serve at all, sir, to space the innerface of the shingle from the curved portion of a lower shingle?

A. What is the innerface of a shingle would depend on the relative areas of the parts contacting and the parts not. In my opinion, in looking at this drawing, the lower edges of all of those ridges are the innerface of the shingle. You will notice that as you look at the pattern in Figure 1 of the embossing. The embossing comes out to round edges, showing that they limit themselves right to that lower face, where all of those so-called ridges are the lower face of the shingle.

Q. Does Belding provide a gutter at all, sir, along the bottom edge?

A. Belding provides an air duct 4, and specifically says that he has no gutter problem.

Q. Is there shown any drain slot in the Belding patent? A. No, sir.

Q. Will you now refer to the Miller Patent 2,243,256, Defendants' Exhibit 31.

A. Yes, sir.

Q. Are you familiar with that patent, sir?

A. Yes, sir.

Q. Will you kindly summarize the disclosure of that patent.

A. We have been talking about diamond-shaped or diagonal shingles and rectangular shingles. Here

(Testimony of Max C. Richardson.)

we have a hybrid shingle. Your Honor, if this shingle, which has tapered edges, were cut off at the two ends and the two ends put together, it [220] would be a diagonal shingle. And all of the structure of that shingle has been made and has been adapted to use like diagonal shingles are used.

These are upward indentations, but the sides and the hooking of these shingles is exactly like the diagonal-type shingle. If those two ends were closed together, you would see that the formation of the shingle is a diagonal structure. The shingle requires that these side edges be tapered or they could not be interlocked together on the roof. It is not a rectangular shingle. Its very structure is such that it could not be interlocked if it were rectangular.

Q. Is there anything stated in the Miller patent, Mr. Richardson, in connection with the water of condensation and the manner of ridding the same, sir?

A. I don't remember anything at all of that kind. However, like all of the diagonal shingles and the makers of diagonal shingles, Miller was concerned with his vertical joint or getting the water down the roof. In the diagonal shingle you come down to a corner and then you go to another corner, and so on, and in place of gutters you have downspouts. And Miller here has been very careful to make a shingle which has the vertical-junction features of the diagonal shingle, and he has spread that into an area here, making the shingle longer, and entirely neglecting his broader difficulties when

(Testimony of Max C. Richardson.)

he tries to make that to cover more space than a horizontal [221] shingle would cover.

He says here: "The nails which hold the units to the roof are all covered by the shingles and the interlocking connections between the shingles are so formed as to permit the free drainage of rain-water that may be driven into such connections." He is particularly interested in water that will be driven into these side seams, but nothing is said about any horizontal drainage. That is, as I remember this.

And in Lines 12 and 13, or thereabouts, the definite sloping nature or tapering side edges is specified, as well as in referring to his drawings.

It is interesting to note that the size of the shingle—he says the blank is rectangular in form, and a suitable size would be 50 inches long and 18 inches in width. Such length and widths would be approximately three times as long and twice as tall as the Korter shingle. That is, it is a panel and not a shingle. It would include an area of, say, six of Korter's shingles. However, size is not necessarily a specification of the patent.

The laying of these shingles is done exactly as you would lay the diagonal shingles, in so far as there a layer of alternate shingles is laid, a horizontal row of alternate shingles, and then you step up half the width of the shingle and lay alternate shingles back in. And since he has attempted to make this hybrid shingle he got himself into a jam and went [222] out and had a lot of special nails

(Testimony of Max C. Richardson.)

made, which became part of his patent, in order to hold this thing onto the roof.

Q. Yes. Will you describe those nails to the Court, please? A. The nail is shown——

Q. Would you like to stand up and show it to his Honor, please.

The Court: I am not interested in his nails. What have I got to do with that?

Mr. Brown: Q. Mr. Richardson, does Miller have any ridges that extend downwardly from the inner face of the shingle? A. No, sir.

Q. Where is that most clearly shown in the patent, sir, in which figure?

A. Figures 7 and 8 are cross-sections through Figure 6, along the center of each of the upper and lower panels of the shingle, and show definitely that the embossing is upward.

Q. Does the Miller patent show any spacing means between the innerface of the shingle and the upper surface of the next lower adjacent shingle?

A. Not integral with the shingle.

Q. Does the Miller patent, sir, show a half-round portion at the bottom edge which terminates in a reversely curved portion?

A. In that respect you would have to rely on some rather sketchy draftmanship. In Figure 3 the bottom edge 11 would [223] appear to have that feature.

Q. Does Miller show a drain slot disposed in the gutter of the shingle? A. No, sir.

(Testimony of Max C. Richardson.)

Q. I am not sure whether you told us—I think you did, but we will consider it repetition—as to whether Miller makes any reference whatsoever, sir, to water on the underside of the shingle caused, for example, by condensation. Does Miller do that?

A. No, sir; he does not.

Q. Will you now refer to the British patent, 399, Defendants' Exhibit 38. Are you familiar with that patent, sir?

A. Yes, sir.

Q. Will you briefly summarize that patent.

A. That is perhaps one of the most elemental shingles that could be made. It is made of a single flat sheet with no embossing whatsoever. It is a diagonal shingle. The opposite edges are oppositely overturned, and it has a tab secured to the back of the shingle at the upper corner which is used for nailing to the roof. And, if desired, other clips can be used to nail along the upper edges of the shingle, the additional clips, however, being no permanent part of the shingle. The joints are very simple, folded joints, except that de Sincay was concerned about the moisture driven in from the outside by the rain and wind and put a trap in the downspouts, and [224] particularly made his vertical lines of water travel the shingle down the roof for the purpose of preventing the exchange of moisture from the inside to the outside except at the lower corner, which he left open to drain these gutters from water that was brought in from the outside.

Q. Does de Sincay make any mention whatsoever, express or implied, sir, of getting rid of the

(Testimony of Max C. Richardson.)

water of condensation on the inside or innerface of the shingle? A. No, sir.

Q. In that case would you have any water of condensation form on the innerface of the de Sincay shingle?

A. I suspect you would, for the reason that it is not hermetically sealed. The opening K on the underside would allow the circulation of air and would allow moisture to be condensed under it. However, that water could not drain back because with the shingle lying on the roof there isn't room enough for a drop of water between the shingle and the roof, and the water would be in contact with the roof. If the roof itself were at all absorbent the water would be absorbed or adsorbed into the roof.

Q. Does de Sincay show or suggest the use of corrugations or ridges, sir? A. No, sir.

Q. Does it disclose a turned bottom portion forming a gutter?

A. These diagonal shingles have no gutters. They have downspouts [225] along the side edges.

Q. Does de Sincay have a drain slot like that in a gutter?

A. They have drain slots located at the junction point of the two side gutters as they meet at the bottom of the diagonal shingle.

Q. Is de Sincay's shingle a rectangular form of shingle as defined by Korter's claim?

A. Not as defined by Korter's claim; no, sir.

Q. Will you kindly at this time explain what

Testimony of Max C. Richardson.)

Q. You mean by a rectangular shingle as defined by Korter's claim.

A. It must necessarily be defined in Korter's claim, and Korter's claim as shown here shows that the corrugations are spaced laterally of the shingle, the lateral edges of the shingle being reversely turned—that is the lateral edges; not the top corner edges—providing curved outer edge portions for locking the shingle with laterally adjacent shingles—not corner adjacent but laterally adjacent shingles. And the very wording of the claim together, of course, with the very plain specification and drawing shows that it must be a rectangular shingle laid with the bottom and top edges horizontal.

Q. Now, in discussing these patents I think, as I recall, sir, it was only in connection with Belding that you mentioned any suggestion in the patent regarding water condensation. Am I correct in that statement, sir?

A. That is the only one I remember. [226]

Q. Now, in your review of all of these patents, the ten of them, sir, do you find the various elements of the Korter claim in combination, including an aluminum shingle of rectangular shape, corrugations forming ridges on the innerface of the shingle, the lateral edges of the shingle being reversely turned on opposite faces of said shingle, to provide curved outer edge portions for interlocking the shingle with laterally adjacent shingles, the top and bottom edge portions of the shingle being reversely turned on opposite faces thereof,

(Testimony of Max C. Richardson.)

each of said top and bottom turned edge portions comprising a half-round portion, one side of which is tangent to the plane of the shingle and the other side of which terminates in a reversely curved portion? Do you find that in any of the patents, sir? A. No, sir.

Q. Do you find in any of the patents that in combination with a gutter and also with a fastening tab, a drain slot, and also in which those corrugation ridges serve to space the innerface of the shingle from the next lower adjacent shingle? Did you find that, sir? A. No, sir.

Mr. Brown: Will Mr. Price give the witness Defendants' Exhibit 43.

Q. Mr. Witness, while no specific testimony was adduced in connection with those two pieces of felt, I understand, sir, [227] that in the case of Mr. Bergman's shingles those two pieces of felt are put under his shingle. I would like to ask you, first of all, will you examine that felt and tell us whether or not it is absorbent of water.

A. Well, I can say it is probably not. I couldn't say by examining the felt that it is not, but I can say that it is probably not from its feel and appearance and its use.

Q. In other words, then, it sheds water from your casual inspection of it, sir?

A. Yes, sir.

Q. I believe you have testified before that in Mr. Bergman's shingle we have ridges going down laterally of the shingle and also that those ridges serve

(Testimony of Max C. Richardson.)

to space the inner surface of the shingle from the top surface of the scroll of the next adjacent shingle. Did you make that statement, sir?

A. Yes, sir.

Q. If those two pieces of felt were placed under Mr. Bergman's shingle, would that felt serve to close up that space that you would normally have where Mr. Bergman's shingle would hit the roof at one edge but would be set upward like that on top of the scroll of the next adjacent shingle or not?

A. This would have no appreciable effect on the space.

Q. Do you know, sir, as to the reason why felt of that character is used in connection with aluminum shingles?

A. It has its usual uses of a vapor membrane or diaphragm or [228] noise-softening or retarding cover, but it is especially required—that is, some sort of water-impervious and electrical insulation is required between the aluminum shingle and any galvanized or steel nails which might be in the under-roof structure to prevent electrolysis and eating holes in the roof at that point.

Mr. Brown: Will you kindly hand the witness two shingles of Plaintiff's Exhibit 3.

Q. Those are the Bergman shingles, Mr. Richardson. Will you kindly tell us, sir, referring to that drain slot in the shingles, is that merely a bleeder opening or can you tell from what you see as to whether it has been deliberately made as a drain

(Testimony of Max C. Richardson.)

slot for draining the gutter of the water of condensation?

A. There are two features—of course, I could not tell what Mr. Bergman or anyone else was thinking about when they did this thing, but there are two elements of the structure of this shingle that would lead anyone to suspect it was made for the purpose of making a drain slot which would function in an equivalent manner to the Korter drain slot.

The first item of suspicion is the cutting back of this corner of the shingles so much farther than necessary for the interlock and actually clipping the corners, the exposed corners, off the shingle.

The next point of assurance that that gutter at the [229] end of the shingle, or the drain slot at the end of the shingle, will stay open is the complete extension of the end of the tab at this point. Now in the Korter shingle as now made this point is cut away to a point where the two shingles can come up to the same horizontal line. Since Korter has placed his slot disposed in the gutter in a position which can allow his shingle to still have that uniform horizontal line, he hasn't had the problem. But when this shingle was cut and the drain was allowed to be the end and corner of this slot, then it was necessary to hold this shingle down below the upper end of this shingle in order that there will always be a gap under the shingle in order to have a functioning drain slot.

Mr. Brown: You may take the witness.

Testimony of Max C. Richardson.)

(Thereupon a recess was taken until 2:00 o'clock p.m. of the same day, at which time Court reconvened and proceedings herein were resumed as follows:) [230]

Afternoon Session, 2:00 p.m.

MAX C. RICHARDSON

witness produced in behalf of Plaintiff, in rebuttal, resumed the stand and was further examined and testified as follows:

Cross Examination

By Mr. Kolisch:

Q. Mr. Richardson, you read to the Court a portion from the Korter patent. Would you please take the patent and put it before you. You read the portion beginning in Column 1, Line 6, concerning the main object of the invention being to prevent leakage from heavy runoff, on condensation, or both. I call your attention to the same column, beginning with Line 18, where it is stated: "Figure 3 is a fragmentary perspective view of one corner of the shingle showing the drain slot which forms the basis of this invention." Would you say that the manner in which Mr. Korter accomplishes his object is by the provision of the drain slot?

A. The drain slot is one of the elements of Korter's improved combination.

Q. Does Mr. Korter in his specification talk

(Testimony of Max C. Richardson.)

anything about a combination of elements?

A. No. He explains his object, and the object requires the combination.

Q. He does not so state, though, does he?

A. No. [231]

Q. He merely says that the object is to take care of this drainage and then later he says that the drain slot is the basis of the invention.

A. Is one of the elements of the invention.

Q. Does he say one of the elements or does he say it is the basis? A. He says the basis.

Q. Would this statement lead you to believe that Mr. Korter, in fact, thought that he had invented a new element in the drain slot?

A. No. Mr. Korter intended, I think, from the patent to indicate that he had invented an improved shingle which would accomplish the object as stated, and that one of the elements of the improvement was the surety of being able to drain the gutter.

Q. Is the Korter shingle watertight?

A. Not as I would understand it, no.

Q. Does that mean that water from the outside can get in?

A. Possibly in small quantities.

Q. How would the water get in?

A. By being driven through the connection.

Q. Therefore, you could have leaks from this sort of shingle if there was a high wind such as to blow the water up underneath the shingle?

A. A leak is a matter of degree. If it would not cause difficulty [232] or a destructive influence on the house, it would not be a leak. If it were a leak

(Testimony of Max C. Richardson.)

which increased humidity, it would still be a leak, but it would not be a damaging leak and would not be ordinarily referred to as a leak.

Q. Whether it would damage or not would depend on how much water was blown in, wouldn't it?

A. That is right.

Q. And it would be possible in the Korter shingle for water to be blown in?

A. With sufficient pressure, yes.

Q. You referred to a new and unexpected result which flowed from the combination as you stated of the elements in the Korter patent. What is that new and unexpected result?

A. Draining the condensation from under the shingle to the outside to remove the moisture and to prevent damage to the house.

Q. Referring to the Crawford patent—do you have that before you? A. Yes, sir.

Q. Would water on the back of that shingle drain to the front?

A. You will have to be quite explicit in telling me at what stage of the development of the Korter shingle you are talking about.

Q. I am not talking about Korter.

A. I meant the Crawford shingle. At what stage? As I understand [233] the Crawford shingle, the shingle is completed in application and is definitely watertight after completion.

Q. All right. Is it possible to make a watertight seal by pounding two pieces of metal together tight?

A. Oh, yes.

(Testimony of Max C. Richardson.)

Q. The resiliency in the metal wouldn't have any effect, would it?

A. You would have to be fairly explicit as to what kind of metal.

Q. Let's take aluminum or sheetmetal.

A. Aluminum can very nicely be pounded together to be watertight.

Q. How about ordinary sheetmetal?

A. When you lid an ordinary can, it is not put together in any way except mechanically. It is put together with pressure, and pounding is repeated pressure.

Q. With reference to the Crawford shingle as it is shown in the drawing, looking at Figs. 2 and 3, does either of these figures show a structure where the corners are secured or pounded together so that water would not run out?

A. These figures?

Q. Yes.

A. No, they show the incomplete shingle.

Q. You mean the unassembled shingle?

A. That is right, the uninstalled shingle.

Q. Do you believe that if you laid these shingles on a roof—as [234] I understand it, the usual practice is to place some sort of a resilient felt pad underneath them—if you laid these on a roof and you pounded on them with a hammer, would you be likely to get a watertight seal?

A. Your understanding of what they had under this roof, as I see it, would have to be taken from the patent, and the patent definitely requires that if

Testimony of Max C. Richardson.)

be pounded watertight. Now I don't see anything in the patent about what they have under the roof. They install this and pound it watertight.

Q. That would mean, then, that over the whole expanse of roof they would have to be very careful to pound each portion? A. That is right.

Q. And if they happened to miss a portion what would happen?

A. If the portion was large enough and if the storm was great enough, that portion would probably leak.

Q. I am not talking about a leak from the outside in. I am talking about water from the inside leaking out.

A. Water from the inside would arrive there in whatever air circulated under it. If the moist air hit a cold surface, it would condense on the cold surface. If the cold surface was flat down, as this shingle would be, on the roof, the water bubble would be too large to pass through the small space between the shingle and the roof, and the roof would be wetted.

Q. How do you know that the water bubble would be too large?

A. Just from what I know of the physical science of water [235] bubbles and of the duration of drip.

Q. Would you say if the shingles were not completely pounded down as you have suggested, and there were some small space left between the ad-

(Testimony of Max C. Richardson.)

joining corners, that any water on the back there could not go through that passage?

A. The water on the back would not probably get to the passage. It would be used in wetting the roof.

Q. Suppose it got to the passage?

A. If the water got to the passage and in making this shingle the passage was big enough for the water to run through? If all of those things occurred, and it was set up so that gravity would act on the water, and the slot were big enough, the water would run out the slot.

Q. Are all of the elements shown in the Korter patent old? A. What is that?

Q. Are all of the elements claimed in the Korter patent old?

A. Are all of the elements enumerated in the claim of the Korter patent old?

Q. Yes. A. Not for their purposes.

Q. Are they old standing alone?

A. I don't believe so.

Q. What is new?

A. The standing rib on the underside of the shingle, the gutter purposely maintained by that rib—— [236]

Q. Let's take up the first one.

Mr. Bischoff: Just let him finish, please.

Mr. Kolisch: I would like to take these up one at a time.

The Court: Never mind. You asked him a question. He has a right to answer it.

(Testimony of Max C. Richardson.)

Mr. Kolisch: All right. Proceed.

A. To repeat where I was interrupted, the new elements of the Korter patent are the standing ribs on the underside of the shingle and the use of those ribs in maintaining the openings to the gutter formed by the reversely turned underedge, and a positive provision of a drain slot of some shape in that gutter to assure the drainage of that slot. Those are all new elements in the art.

Q. Aside from their functionality, what these elements do, are these ribs new, or did ribs such as those exist before? Maybe not to perform the same function, but did those ribs exist?

A. Why, of course. They have ribbed metal for years.

Q. Did drain slots exist?

A. Drain slots in shingles?

Q. Yes.

A. I don't remember them, no. That is, I don't know. But I again want to repeat that any rib or any gutter or any drain slot is not combined in the Korter patent, but it is combined [237] in the way of the Korter patent, and that makes the improvement.

Q. You are now referring to the function of these elements in the Korter patent, are you not?

A. Practically speaking, that is the only criterion for a patent claim. They have to accomplish the result.

Q. Now, what was the change in the functions of these old elements? For instance, let's take those

(Testimony of Max C. Richardson.)

corrugations which you referred to first. What was the functional change brought about by Korter with respect to that?

A. The use of the rib in the Korter claim is self-evident. The use of the rib, if there was such a thing in some other patent or in some other place, I would like to have explained to me where it is so that I can examine what it is used for in order to explain the change of use.

Q. Are you familiar with corrugated roofing?

A. Yes.

Q. Does corrugated roofing—

A. Would you like to use the Pruden patent as a sample?

Q. Refer to the Pruden patent, if you will. I call your attention to Figure 2. A. Yes.

Q. Element 16. Are those corrugations similar to Korter's?

A. Would you mind helping me find element 16 on Figure 2?

Q. It is shown right in the middle underneath where it says [238] "Fig. 2." You will find right in the middle of the drawing element 16. There are three lines going from that number.

A. I am sorry. Would you like to point it out?

Q. I am sorry. I am looking at the Belding patent.

A. Well, that is different. The Pruden patent is the one that shows corrugated roofing.

Q. Will you refer to the Belding patent. Now I

Testimony of Max C. Richardson.)

all your attention to element 16 in Figure 2 there.

A. Yes.

Q. Are those corrugations like those in the Korter patent?

A. Like those in the Korter patent?

Q. Yes. A. I wouldn't say so, no.

Q. Are they corrugations?

A. I wouldn't say so.

Q. What would you call them?

A. I would call them embossed figures.

Q. Embossed figures? A. Yes.

Q. What distinction do you make between embossed figures and corrugations?

A. A corrugation is, to my mind, a straight from end to end, and one corrugation has a uniformity with another corrugation. Here we have a bunch of miscellaneous bumps of various lengths, with straight sides, and various cross-sections, and I would [239] not say that those were corrugations.

Q. What would you say with respect to elements 13, 14 and 15?

A. They could well be called corrugations.

Q. Are those corrugations similar to Korter's?

A. No.

Q. Wherein are they structurally different?

A. Because they only come down to the face of the shingle, the underside of the shingle, and the lower part of them really is the underface of the shingle, and the other material is bumped up around them rather than being bumped down.

Q. What you mean to say is, then, that Korter's

(Testimony of Max C. Richardson.)

are slightly longer than these with respect to the shingle?

A. Korter's extend below the face of the shingle for the purpose carefully explained by Korter.

Q. Will you take the physical exhibit of the accused shingle, Plaintiff's Exhibit 3. Do the vertical embossings or corrugations on the accused shingle project beyond the turned top and bottom edges of the shingle?

A. They extend the full length of the shingle at the bottom, and at the top they go up under the turned edge but do not go clear to the top.

Q. With respect to the plane defined by the top of the shingle and the reversely turned bottom edge, do these embossings project beyond that plane and into that plane?

A. Let's be quite specific now. What plane are you talking [240] about?

Q. I am talking about the plane defined by the top of the shingle, the back top portion of the shingle.

A. Looking at the back of the shingle?

Q. Yes, looking at the back of the shingle, the back top portion of the shingle and the uppermost reversely turned portion of the bottom edge.

A. This is the bottom edge. Now what part of the bottom edge?

Q. The plane defined between these two points.

A. That is the plane of the shingle before being embossed. Is that what you mean?

Q. No. Perhaps I can get at it this way: If you

(Testimony of Max C. Richardson.)

will take a straightedge, or another shingle, and lay the straightedge, Mr. Richardson, transversely, such as I will show you——

A. Transversely across there?

Q. Yes. Now, this edge of the shingle defining the plane about which I am talking, if you take that edge and move it along the face of the accused shingle——

A. Like this?

Q. Yes. Now move it in the manner that I have done.

A. You mean an imaginary plane that is not in the shingle?

Q. Yes, that is right. That is an imaginary plane I am talking about.

A. Yes. [241]

Q. Now do these embossed portions reach that plane?

A. They couldn't. They are underneath the edge that you are talking about.

Q. Will you take the patented shingle, Plaintiff's Exhibit 2, and will you perform the same demonstration with respect to the patented shingle.

A. Yes.

Q. Do you observe any difference between the two, as between the patented and the accused shingles?

A. I observe a shingle in my hand here which has been handled a great deal and is somewhat mutilated. In some places it would and in some places it would not.

Mr. Kolisch: Will you hand Mr. Richardson all of the patented shingles. There are three more.

(Testimony of Max C. Richardson.)

Q. Will you check all of these shingles in a similar manner and let me know what you find.

A. I think you will see that all of them have been overhandled, and in some places they do and in some places they don't.

Q. Isn't it part of the teaching of the Korter patent that the bottom of these embossed portions rest on the roof?

A. Only at the top end.

Q. Only at the top end?

A. Yes.

Q. Now, certainly a portion of this shingle contacts whatever surface is beneath the shingle, doesn't it? [242]

A. Yes. We went into that the other day, if you will remember.

Q. If there were condensation there or water there, would that water tend to run onto whatever is contacting the shingle?

A. Yes.

Q. So that wherever the shingle would be contacting the felt here the water would run onto the felt, would it not?

A. If there were felt contacting it, the water would run onto the felt.

Q. There would be felt contacting it, wouldn't there?

A. I didn't say that.

Q. I beg your pardon?

A. You could set it up so it would.

Q. Doesn't Mr. Korter teach that in his patent?

A. No.

Q. Doesn't he state that these embossings rest on the material——

A. On what material?

Q. On the material that is beneath the shingle

Testimony of Max C. Richardson.)

call your attention to Fig. 6 of the Korter patent.

A. Yes.

Q. What does that show with respect to element 12?

A. That shows element 12 rests on element 19.

Q. Yes. What is element 19?

A. Element 19 is the top side or upper roll of the next lower [243] shingle.

Q. That is at the bottom portion?

A. Yes.

Q. Now at the other end of element 12 isn't element 12 resting against whatever material is beneath the shingle?

A. A shingle being applied to a roof has to contact the roof somewhere, which it does at the top end. That is shown in Figure 4.

Q. So the portion where it is contacted is somewhere along the top?

A. That is right. However, the area of contact is a very small part of the total area of the shingle.

Q. Now, does the felt which is placed beneath the shingles lie perfectly flat, or does that tend to have irregularities and bumps in it?

A. It would depend on what it was laid on, it would depend on the temperature at which it was laid, and the temperature at the time you looked at it. It would depend on many things.

Q. Isn't it a fact that these felt pads are nailed to whatever is beneath them? A. Yes.

Q. And are these felt pads of flexible and resilient material?

(Testimony of Max C. Richardson.)

A. They are flexible; not necessarily resilient.

Q. Would the material tend to be lower in portions where it was nailed to the roof and higher in other portions? [244]

A. You mean there would be a depression at the nailhead?

Q. Yes. A. Very likely.

Q. Would it be possible that looking at an expanse of roof covered by this felt there would be buckling or irregularities or blisters in it? Could you as a practical matter lay it perfectly flat?

A. You could lay it flat within the area of a shingle. Remember, a shingle does not span the whole roof. A shingle spans its own length and width.

Q. Is it laid flat with respect to each shingle?

A. I wouldn't say in any particular case. We would have to examine that to find out.

Q. Do you know how the felt is applied to a roof? A. Yes.

Q. How is it applied to a roof?

A. It is nailed on, laid flat and nailed on.

Q. Isn't it laid on in rolls?

A. Sometimes.

Q. It is not applied section by section corresponding to a shingle?

A. It could be. You will use up the ends of your rolls, which are then short sections.

Q. But you start off by putting on a rather large section, don't you? [245]

A. You use the available paper; yes, sir.

(Testimony of Max C. Richardson.)

Q. Now, the prior art patents which you discussed and which are relied on by defendants, don't they all relate to the metal shingle art or to the roofing art?

A. Some do one and some do another.

Q. I beg your pardon?

A. Some do one and some do another.

Q. Would you say, then, that all of these patents were pertinent?

A. No. As a matter of fact, I would say, like the patent examiner said, that none of them finally were pertinent after they were examined.

Q. They all relate, at least, to the same art as the invention, do they not?

A. It depends on what division of the art you want to talk about and how wide those divisions are.

Q. Would you say any of them relate to any non-analogous art?

A. Oh, an analogous art. Yes, I think you would be right if you said an analogous art.

Q. With reference to the Lewando patents, you stated that these patents teach an airtight construction and that there would be no condensation behind these shingles. Is that correct, Mr. Richardson?

A. Yes, I believe said that.

Q. Did you mean to say that there was a vacuum provided [246] between the shingles and whatever their supporting surface was?

A. A vacuum?

Q. Yes. A. No.

Q. There would be air there, would there not?

A. No. I will tell you: If you reduce the pres-

(Testimony of Max C. Richardson.)

sure, the atmosphere would push the shingle so tight that there would be no space there. You couldn't have a vacuum there.

Q. Is it your testimony, then, that there is no space in the Lewando patents?

A. That is the intent of the Lewando patents, yes, that there be no space.

Q. That there be no air space? A. Yes.

Q. And they would be laid absolutely flush against the roof?

A. That would be the intent, yes.

Q. Now, are the Lewando patents of the interlocking type? A. That is right.

Q. And where two of these shingles interlock, wouldn't the portion of the top shingle hold the other shingle away from the roof? A. Yes.

Q. Wouldn't that give you an air space?

A. We are talking of sizes again. Of course, if you want to [247] reduce things to micrometer measurements, and things of that nature, you can go to quite some extent. But, speaking practically, there is no air space.

Q. There wouldn't be any air space even though they are interlocked? A. Practically, no.

Q. Isn't it a fact that condensation will take place usually where there is no ventilation, and that if you have a shingle construction over something else, and you have provided for no ventilation for this space, however large or small it may be, there is a probability that with temperature changes you will have condensation?

(Testimony of Max C. Richardson.)

A. Again, you must talk about something definite. "Ventilation" is nothing definite used as a word as you said it. Condensation is due to the interchange of warm moisture-laden air next to a cold surface. If there is only one volume of air that meets a cold surface, it drops its moisture and then is no longer moisture-laden and no more will be dropped. If the moist air is replenished so that you have a circulation of moist air, either by convection currents or otherwise, you will have continued condensation.

Q. But in the example that you gave you will have at least one instance of condensation, will you not? A. Yes.

Q. If the ventilation or the circulation of air is sufficient [248] so that the air inside, let us say, is of the same temperature as the air outside, will that prevent condensation?

A. I would like to have you say whether or not you are talking about moisture-laden air or ventilation by bringing in dry air, or just what it is you are talking about.

Q. You are permitting the inside air to be of the same water content, and so forth, as the outside air. In other words, you permit air from the outside to freely move inside.

A. If you have the same absolute moisture content in the cold air and the warm air, the warm air will probably not drop its moisture and when it gets cold will have the same water characteristic as the cold air and move on with it. You are talking

(Testimony of Max C. Richardson.)

about something that is very specific. I am sorry if I have misled anybody, but it would take talking to someone who probably knows more of the psychometric chart than you do for me to explain it.

Q. Will you look at the Slaughter patent.

A. The Slaughter patent.

Q. Does this patent show a substantially flat sheet of rectangularly shaped metal? A. Yes.

Q. Does it show reversely turned edges?

A. Yes.

Q. And are these reversely turned edges interlocked in order to build up a roof covering? [249]

A. Yes.

Q. You stated that this shingle laid flat on the roof, I believe. A. Yes.

Q. I will call your attention to Fig. 4 and ask you if the construction there shown illustrates that the shingle could possibly lie flat on the roof.

A. We are defining "flat." I would say practically flat. When you have two thicknesses of, say, 20/1000ths metal and 20/1000th nailhead — 40/-1000ths, possibly—I would say it was practically flat, yes.

Q. There is an air space there, though, is there not?

A. You mean that there are places where there is not absolute contact of the shingle with the supporting structure? There is. As a matter of fact, as shown, if you want to look at the drawings, the roof is practically flat as seen in Figure 1. It has

(Testimony of Max C. Richardson.)

no sheathing, and that roof, if there was any warmth inside the building, would just drop water all over everything.

Q. Are you through, Mr. Richardson?

A. Yes.

Q. Will you refer to the Cusack patent.

A. Yes, sir.

Q. Does this patent show one nailing tab just like the patented structure? [250]

A. The Cusack patent?

Q. Yes.

A. Now, leaving off "just like the patented structure," and saying that it has one nailing tab and comparing the shingle, yes. Figure 2 shows one nailing tab per shingle.

Q. Is that what the patented structure has?

A. The patented structure has one nailing tab.

Q. Wouldn't the Cusack patent also be held away to some extent from the roof by the reversely turned edge, the same as the Slaughter patent?

A. I think, as Figure 5 was discussed this morning, we have a pile-up at the corners, and that pile-up can be added up to four or five or six thicknesses of metal, which with the thickness of our metal is 20/1000ths, approximately, in the shingles we have in evidence here. That would make somewhere around an eighth of an inch maximum raise of the shingle at the corner of the roof.

Q. Does Cusack also show a design on his shingle in Figure 3? A. Yes, he does.

(Testimony of Max C. Richardson.)

would be open on one side and substantially horizontal, and that a downspout would have an element of almost enclosure and would be at nearer a vertical.

Q. Yes. It would be open, also?

A. What?

Q. It would be open, also?

A. Not necessarily, but it could be, yes.

Q. To permit water to pass through it?

A. Oh, yes. Open endways, yes.

Q. And they are both for the purpose of conveying water away or to some place?

A. That is right.

Q. When you were discussing the Miller patent I believe you stated that the shingles were placed diagonally on the structure, assembled diagonally

A. No, I said they were constructed and made to be applied like diagonal shingles, and they are applied alternately in horizontal rows like the diagonal shingles because of their construction like diagonal shingles.

Q. I call your attention to the statement on Page 1, Column 1, beginning with Line 19, where it says that the shingles [254] extend crossways of the roof.

A. That is right; they do, half-lapped top and bottom.

Q. I call your attention to Figs. 9 and 10 of the Miller patent, and ask you if these figures show that there is a spacing between the back of the Miller shingle and the supporting structure.

(Testimony of Max C. Richardson.)

A. Yes, it would appear that that was so.

Q. Referring to the British patent, is this a square shingle?

A. Physically square, and separate from the roof, yes.

Q. Does this shingle provide a means for draining water which may get on the back of the shingle for any reason onto the face of the next succeeding shingle or lower shingle?

A. No.

Q. What does element K do in the British patent?

A. It drains the seams listed in Figures 4 and 5.

Q. If there is any water in those seams——

A. It drains out onto the next shingle.

Q. Supposing there was water that formed on the back of the shingle?

A. We can only read the patent to see that they have made no provision for that. If you will read Page 4, beginning Line 10: "For this purpose the four lateral flanges by which the tiles are connected together are provided with hollow beads or rims J, so that when the tiles are superimposed a free space is left between them, and the wind is [255] prevented from entering under the tiles, while the reflux of the rainwater cannot take place. Owing to the slant of the roof and the disposition of the flanges any water which may have penetrated to a certain extent between the tiles under the action of a high wind will run off to the lower corner K of the tiles, and so onto the roof."

Q. Supposing there were water of condensation

(Testimony of Max C. Richardson.)

Lines 10 and on: "Furthermore, it is well known to those versed in the art of roof construction that metallic roofs are subject to what is technically known as 'sweating' which appears in the form of an accumulation of condensate and moisture upon the underside of the shingles adjacent the sheathing material."

I believe that that is a good report of prior art experience.

Q. But there are no other patents which we have before us which talk about it?

A. That is right.

Q. Is it not true that in patent draftsmanship the use of a term such as "well known" as used in this Belding patent is quite commonly used by draftsmen? A. That is right. [258]

Q. Now, you made a distinction between a bleeder and a drain slot.

A. I don't remember that. Possibly I did.

Q. I will ask you, then. I believe you were talking about water which might come out of the corners of a shingle, and you referred to those openings as bleeder openings.

A. I don't remember that I did, but I might have.

Q. Well, would you refer to those as bleeder openings or not?

A. I would refer to them as openings of little capacity and they would probably be blocked after a certain use.

(Testimony of Max C. Richardson.)

Q. Blocked by dirt or some foreign matter? Is that what you are referring to?

A. Or corrosion, yes.

Q. However, if these bleeder openings were on the large side, it would be more difficult for them to be blocked?

A. That is right.

Q. Now, referring to the accused shingle, calling your attention to these openings at the corner, could these openings function as a means for permitting air to go behind the shingle?

A. They couldn't help it.

Q. Referring to the structure of the original Korter application—

A. The what? [259]

Q. —which did not have the drain slot—did you hear what I said?

A. Referring to the original Korter application?

Q. Yes, that structure that did not have the drain slot.

A. Possibly I should see that.

Q. Here you are.

A. I would rather see the patent or the application.

Q. You are familiar with the application, aren't you?

A. Yes, but I am sure you are going to want me to be exact and not guess at this, aren't you?

Q. Certainly.

A. Then I would like to have the file wrapper.

Q. Are you ready, Mr. Richardson?

A. I haven't found the drawing yet. Here it is.

Q. Now, referring to Defendants' Exhibit 42, which is a sample of shingle made according to that

(Testimony of Max C. Richardson.)

application, that shingle did not have a drain slot in it, did it?

A. Yes, I would say it had a drain slot. It has two drain slots. It has both ends open on the gutter.

Q. All right. Now, did that shingle work to drain any water of condensation which might form on the back of it?

A. It would certainly drain some.

Q. It did function as a drain?

A. It must have, yes.

Q. What was the improvement, then, in placing another hole [260] in the gutter?

A. The improvement in providing an adequate drain slot which would not be clogged in combination with a gutter which required draining and means for draining the condensation into the gutter is the improvement of the Korter patent.

Q. In other words, it made the drainage better in the Korter patent which was issued as compared to the shingle you have in your hand?

A. It certainly would, yes.

Q. It was a question of making better drainage?

A. It was a question of assuring drainage throughout the life of the shingle, yes.

Mr. Kolisch: That is all.

Mr. Brown: That is all.

The Court: I want to ask Mr. Richardson a couple of questions. If this roof had the accused shingle built on it in such a way that the problem

Testimony of Max C. Richardson.)

Q If water of condensation was eliminated, there wouldn't be any infringement then, would there?

A. If you had a roof built with the accused shingle and there was no condensation formed on the underside, the infringement would still be there if that building were capable of operation so that condensation would form. Infringement, as I understand it, is not necessarily present every day; that is, [261] on a dry, sunshiny day the infringing shingle infringes just as much as it does on a wet day.

The Court: Yes, but if the roof were built to absolutely foreclose water condensation under the shingle, it wouldn't infringe, would it?

A. Yes, because it is capable of operation—the shingle itself here is the infringing device, and not the roof.

The Court: What you are saying, though, is that if they added another element to the combination which foreclosed water condensation it would then not infringe because it would be a new invention?

A. No. Of course, the practical matter would be for them to leave out these improvements that they have and build a tight roof. Why are they afraid of being unable to build a tight roof and take these improvements and put them on their shingle? If we had to prove that every infringing shingle always infringed, we had better just save our money.

The Court: If it was proved, though, that it never was intended to function by that method be-

(Testimony of Max C. Richardson.)

cause of the addition of some other element, that would prevent it from infringing, wouldn't it?

A. No, the addition of an element does not avoid infringement, if the structure includes the same elements.

The Court: I wonder. I don't think that is accurate. If you add a new element to a larger structure which prevents [262] it from functioning in the way in which the previous patent functions then there is no longer any infringement, is there?

A. If the old elements are present in the claim and could function as claimed, adding a new element and temporarily using some of the devices for non-functioning purposes would not prevent you from infringing by making, using or selling, if the devices you made, used or sold could be used to infringe.

The Court: Perhaps I am asking a question of law.

The Witness: Of course, it means a great deal to me. I am in the business of advising my own patent clients. I believe I have the thing in my mind in accordance with the practice and the requirements of the office and the law.

The Court: Now, taking this question of the drain slot. That is a salient element of the combination?

A. Yes. That is, means for draining the gutter is a salient part of the combination.

The Court: The other side says that their shin

(Testimony of Max C. Richardson.)

gle does not infringe because they don't have a drain slot. How do you reconcile that?

A. Well, they have a drain slot.

The Court: In other words, you say they have an equivalent?

A. That is right. There is nothing in the patent and there is nothing in the dictionary which says what shape or size or position a slot shall have. The patent says a drain slot. [263] Now a slot is not always a drain slot, but a slot which necessarily drains and is disposed in the gutter and which drains the gutter is a drain slot in the Korter claim.

The Court: Do you find any shingle in the previous art which had such a loose combination that it would have acted to withdraw the water of condensation off the inner surface of the roof?

A. Of course, it is difficult not to read a prior art with hindsight. When we go into matters of this kind, we have to read patents for what they teach us; not what we can teach them. It is only what they can teach us, and we are somewhat limited to what they actually say. We are not in a position to read into the previous inventor's mind something he left out of his invention. However, we can take notice of the state of the art and the probabilities, and I think you will find, if this matter is considered in view of the circumstances under which shingles have been used in the past and the development of the use of shingles, that shingles in the past have been generally used in the way of making a tight sheathe over a roof, and that the

(Testimony of Max C. Richardson.)

effort has been to make the thing entirely airtight and watertight, and that it is only in the late-comers where it has been thought desirable or they have made an effort to make a shingle to actually have that condensation form where they wanted it to form in order to take it off. [264]

Now, as I pointed out in Belding, which is the primary citation here for the reason that it is the only patent that teaches the handling of the condensation problem, and therefore it is the only teaching patent here, it definitely takes another angle to handle the problem. It definitely removed the heat from the underside of the roof by insulating the metal sheathing so that both sides will have the same temperature and the air on the underside will have the same temperature as the roof. Then the shingle lies flat on this insulating board, with only one embossing raised underneath, and thus air did not circulate through and it would diffuse air from an air duct along the underside.

Now a carefully made roof of that type would not have the condensation problem beyond the ability of that small amount of circulating outside air to keep the roof dry. But that particular problem could not be handled with that type of a shingle without the insulating board.

The Court: Of course, you say that we ought not to read back of our present knowledge, as the Court of Isabella did after they saw Columbus span the ocean, but if there is a structure in the public domain, whether under patent or not, in which the

(Testimony of Max C. Richardson.)

specifications do not claim a particular invention, but it does actually operate in that way, nevertheless, it is anticipation? [265]

A. Yes, that would be true, if it actually operated that way.

The Court: But you find nothing in any of these prior patents that are here in evidence——

A. I find nothing in any of the prior patents except Belding that even recognizes the problem.

The Court: And that solves it in a different way?

A. That solves it in a different way.

The Court: Would you like to inquire of him any further as a result of the Court's examination?

Mr. Kolisch: I would like to mention just one thing.

Q. May I ask you, Mr. Richardson, to refer to the Korter patent. With respect to the question of infringement, the Court asked you whether or not there was infringement if the accused structure did not have a slot such as called for by the Korter patent. As I recall your answer, you said that it was the same thing; all that is important to respond to the Korter claim is to have a means for draining. Is that correct?

A. That is practically so, yes.

Q. I call your attention to the end of Column 1, in which the patentee says: "I have provided each gutter edge 16 with a drain slot 21 near the corner 2 of the shingle."

A. That is right.

Q. Then he says: "Obviously more slots 21 may

(Testimony of Max C. Richardson.)

be employed [266] without departing from the spirit of this invention." A. That is right.

Q. He does not mention that corner 22 is a drain, does he?

A. It doesn't mention that corner 22; no, it does not.

Q. He merely says that the drain slot is an opening 21 provided near the corner.

A. "Obviously," he says, "more slots may be employed."

Q. Slots like 21?

A. No. Now, if you were to find in the prior art slots functioning as the combination of Korter, and it became of patentable importance that the claim was in the shape of the slot, then the shape of the slot would be controlling. But we find nowhere in the prior art any slot beyond that mentioned by Korter, and he therefore is entitled to the broad equivalents of the illustrated slot. Korter is not required, when he makes his patent application, to illustrate every type of slot. Korter is required to illustrate what he considers a possible mode of operating his invention. He has to illustrate one way, but it is only prior art that limits him from claiming all ways, and the prior art does not show other ways of doing the thing.

Q. Have you finished?

A. That is all right.

Q. Korter does not teach in his patent any equivalents of slot 21, does he? [267]

A. Korter doesn't teach it?

Testimony of Max C. Richardson.)

Q. Doesn't teach any equivalents in his patent?
Does he mention any?

A. Any equivalents to the slot?

Q. Equivalents to slot 21?

A. For goodness sake, Mr. Kolisch, I don't want to get all hectic about this, but I would just like to point out that the only reference as far as structure goes in the claim is "a drain slot disposed in the gutter of said shingle for draining water therefrom." And he has the entire breadth of that in his claim, anyway. There is nothing in the claim that says anything about the shape of the slot. It just is disposed in the gutter for the purpose of draining the gutter. And it is allowed and it is assumed to be valid, and there is nothing in the prior art that says that that combination with any form of slot in the gutter is in the prior art.

Q. Mr. Richardson, when Mr. Korter uses the term "drain slot" in his claim——

A. He is illustrating a possible mode. He must illustrate something, according to the patent law.

Q. And to find out what he meant by "drain slot," don't we look at his drawings and his specification?
A. No.

Q. Where do we look? [268]

A. We look into the prior art for the breadth of meaning of his claim.

Q. In other words, is it your position, Mr. Richardson, that a patentee does not define in his specification the words that he uses in his claims?

A. The patentee in his specification and in his

(Testimony of Max C. Richardson.)

drawings specifies a mode for the operation or use of his invention. Then if in the prosecution of the case no other way of operating in accordance with that invention is found, the inventor had the full breadth of any way of doing it. He is entitled to the full equivalents. If he finds that there are other ways, then he is limited to his specific way.

Q. Is it then your position that there was never a drain slot before Korter?

A. There never has been a combination of the improvement of a method to drain condensation from the underside of a shingle.

Q. Were there ever drain slots structurally such as 21?

A. You mean have there been oval holes in anything? Of course, there are oval holes all over.

Q. In gutters?

A. In gutters? I don't know. I haven't seen them. But there is certainly nothing that functions in the prior art that would cause you to say that the drain slot of Korter is found in the prior art.

Q. To your knowledge, you have never seen a hole in a gutter [269] such as shown in element 21 in the Korter patent?

A. In a gutter? What kind of a gutter?

Q. Any kind of a gutter for carrying water.

A. No. No, I wouldn't say so.

Mr. Kolisch: Thank you. That is all.

Mr. Brown: That is all.

(Witness excused.)

The Court: You have no more testimony?

Mr. Bischoff: No. Plaintiff rests.

The Court: What do you wish to do about submission now, Gentlemen?

Mr. Bischoff: Your Honor, Mr. Brown expressed desire that he would like to argue the matter and present our views to your Honor orally, if that is possible. Then, in any event, we would like an opportunity to submit a memorandum to your Honor.

The Court: If you are going to submit a memorandum, I have followed the practice of the appellate courts. I don't want any oral argument until after I have had a chance to read the memoranda.

Mr. Bischoff: That perhaps may be a desirable way to do it. We would like to submit a memorandum.

The Court: Whether it is better or not, that is my way.

Mr. Bischoff: That will be satisfactory to us, your [270] Honor.

Mr. Kolisch: That is agreeable to the defendants.

The Court: How much time do you want to file your memorandum?

Mr. Bischoff: We would like to have about 25 days after we receive the transcript to file an opening brief.

Mr. Kolisch: I would like to have two weeks after receiving their brief.

The Court: All right. I will set the time tentatively. I am not going to make any hard-and-fast rule on the Reporter, but he will make a reasonable effort to get it to you as soon as possible. I will

give you 25 days after receipt of the transcript, and I will give you 25 days after receipt of the brief of the other side.

Mr. Bischoff: May we have, your Honor, 15 days to file a reply memorandum?

The Court: Reply brief in five days. You should reply in five days.

Mr. Bischoff: I normally think that would be correct, but Mr. Brown is in Dayton, Ohio, and I have to correspond with him.

The Court: All right. I will say 15 days.

(Whereupon proceedings in the above matter on said day were concluded.)

[Endorsed]: Filed May 5, 1954.

[Endorsed]: No. 14968. United States Court of Appeals for the Ninth Circuit. Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville, doing business under the assumed name of Langville Manufacturing Company, Appellants, vs. Aluminum Lock Shingle Corporation of America, Appellee. Transcript of Record. Appeal from the United States District Court for the District of Oregon.

Filed: December 7, 1955.

/s/ PAUL P. O'BRIEN,
Clerk of the United States Court of Appeals for
the Ninth Circuit.

In the United States Court of Appeals
for the Ninth Circuit

No. 14968

HARRY X. BERGMAN, et al., Appellants,

vs.

ALUMINUM LOCK SHINGLE CORPORATION OF AMERICA, Appellee.

APPELLANTS' STATEMENT OF POINTS
ON APPEAL

Come Now appellants, Harry X. Bergman, Perma-Lox Aluminum Shingle Corporation, and Victor H. Langville doing business under the assumed name of Langville Manufacturing Company, and make and file herein their statement of points upon which they intend to rely upon appeal herein, as follows:

1. The trial court erred in construing the patent in suit to be infringed by the accused structure (aluminum shingle).
2. The trial court erred as a matter of law in applying Title 35 U. S. Code, Sections 102, 103 and 112, to the patent in suit and in adjudging said patent to be valid and infringed.
3. The trial court erred in adjudging that the patent and the claim thereof are not so limited by the prior art conceded and in evidence as not to be infringed by appellants.

4. The trial court erred in adjudging that the patent in suit and the claim thereof is not so limited by the proceedings in the United States Patent Office during the prosecution of the application for said patent and a co-pending application, as not to be infringed by the accused structure.

5. The trial court erred in adjudging the scope of the patent in suit and the claim thereof to extend and to cover an aluminum shingle like the accused structure which does not have a drain slot such as shown and claimed by the patent in suit.

6. The trial court erred in holding and adjudging that the accused structures made and sold by appellants constitute a combination of parts equivalent to the patent in suit and therefore infringe said patent.

7. The trial court erred in holding and adjudging the patent in suit and its claim thereof to be valid in view of the prior art and prior knowledge introduced in evidence.

8. The trial court erred as a matter of law in not applying the requisite standard of invention and in holding that the patentee, L. J. Korter, had made a patentable invention.

9. The trial court erred in holding that the patent in suit is entitled to a range of equivalents which included the accused structure.

10. The trial court erred in adjudging and holding the patent in suit and its claim valid when construed to be infringed by the accused structures.

11. The trial court erred in adjudging and finding that appellant, Harry X. Bergman, is personally or individually liable for any infringement of the patent in suit.

Respectfully submitted,

/s/ ROBERT F. MAGUIRE,

/s/ J. PIERRE KOLISCH,

Of Attorneys for Appellants

Acknowledgment of Service attached.

[Endorsed]: Filed December 2, 1955. Paul P. O'Brien, Clerk.

